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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

GOOGLE LLC,  
  
Plaintiff,  
  
v.  
  
SONOS, INC.,  
  
Defendant.

Case No. 3:20-cv-06754-WHA

**SONOS, INC.'S AMENDED ANSWER  
TO GOOGLE LLC'S SECOND  
AMENDED COMPLAINT AND  
SONOS, INC.'S COUNTERCLAIMS**

**DEMAND FOR JURY TRIAL**

Judge: Honorable William Alsup

**REDACTED PUBLIC VERSION**

**SONOS'S ANSWER**

1  
2 1. Sonos admits that Google purports to seek a declaratory judgment regarding alleged  
3 non-infringement and alleged invalidity of the '615, '033, '966, and '885 patents. Sonos denies  
4 any remaining allegations of this paragraph.

**NATURE OF THE ACTION**

5  
6 2. Sonos admits that Google's Second Amended Complaint purports to be an action  
7 for declaratory judgment and invalidity. Sonos admits that Google infringes the '615, '033, '966,  
8 and '885 patents at least as a result of the activities identified in Sonos's infringement contentions  
9 served in this case. Sonos denies any remaining allegations of this paragraph.

10 3. Sonos admits that there is a justiciable controversy between Sonos and Google  
11 concerning the '615, '033, '966, and '885 patents. Sonos denies any remaining allegations of this  
12 paragraph.

13 4. Sonos admits that Sonos filed an action against Google for infringement of the '615,  
14 '033, '966, and '885 patents on September 29, 2020. Sonos currently lacks knowledge or  
15 information sufficient to form a belief as to the truth or falsity as to allegations concerning Google's  
16 apprehension and therefore denies them. Sonos denies any remaining allegations of this paragraph.

17 5. Sonos admits that Google's Second Amended Complaint purports to be an action  
18 for breach of contract and conversion. Sonos denies any remaining allegations of this paragraph.

**THE PARTIES**

19  
20 6. Admitted.

21 7. Admitted.

**JURISDICTIONAL STATEMENT**

22  
23 8. Sonos admits that Google's claims purport to arise under the 28 U.S.C. § 2201 and  
24 35 U.S.C. § 1 *et seq.* Sonos admits that the Court has subject matter jurisdiction concerning the  
25 '615, '033, '966, and '885 patents under 28 U.S.C. §§ 1331, 1338(a), and 2201(a). Sonos denies  
26 any remaining allegations of this paragraph.

27 9. Sonos does not dispute that the Court can exercise supplemental jurisdiction over  
28 the state-law claims articulated in Google's Second Amended Complaint. Sonos denies, however,

1 that Google's state-law claims are related to Google's claims of non-infringement or that they form  
2 part of the same case or controversy. Sonos denies any remaining allegations of this paragraph.

3 10. Sonos does not dispute that the Court may exercise personal jurisdiction over Sonos  
4 for purposes of this action. Sonos denies any remaining allegations of this paragraph.

5 11. Sonos does not dispute that venue is proper for purposes of this particular action.  
6 Sonos admits that on September 28, 2020, Sonos sent an email to a Google employee who works  
7 in this District indicating that Sonos will be initiating a case against Google asserting infringement  
8 of the '615, '033, and '966 patents as well as U.S. Patent Nos. 9,344,206 and 9,219,460. Sonos  
9 admits that Sonos filed an action for patent infringement against Google on September 29, 2020 in  
10 the Western District of Texas ("Texas Action"). Sonos admits that this Texas Action was  
11 transferred to the Northern District of California on September 28, 2021. Sonos admits that the  
12 Content Integration Agreement includes a forum selection clause. Sonos denies any remaining  
13 allegations of this paragraph.

14 12. Sonos admits that there is a justiciable controversy between Sonos and Google  
15 concerning the '615, '033, '966, and '885 patents. Sonos denies any remaining allegations of this  
16 paragraph.

17 **INTRADISTRICT ASSIGNMENT**

18 13. Admitted.

19 **ALLEGATIONS CONCERNING**

20 **SONOS'S COLLABORATION WITH GOOGLE**

21 14. Sonos currently lacks knowledge or information sufficient to form a belief as to the  
22 truth or falsity as to the allegations in this paragraph and therefore denies them.

23 15. Sonos currently lacks knowledge or information sufficient to form a belief as to the  
24 truth or falsity as to the allegations in this paragraph and therefore denies them.

25 16. Sonos currently lacks knowledge or information sufficient to form a belief as to the  
26 truth or falsity as to the allegations in this paragraph and therefore denies them.

27 17. Sonos admits that Sonos and Google have collaborated in the past. Sonos denies  
28 any remaining allegations of this paragraph.

18. Denied.

19. Sonos admits that the parties collaborated in 2016 concerning a solution to provide the Google Assistant feature on Sonos's devices. Sonos currently lacks knowledge or information sufficient to form a belief as to the truth or falsity as to the remaining allegations in this paragraph and therefore denies them.

20. Sonos currently lacks knowledge or information sufficient to form a belief as to the truth or falsity as to the allegations in this paragraph and therefore denies them.

### **ALLEGATIONS CONCERNING**

### **SONOS AND GOOGLE ENTER INTO COLLABORATION AGREEMENTS**

21. Sonos admits that Google and Sonos executed documents in connection with the collaboration concerning Google Play Music and the Sonos Music System, including what Google alleges is a 2013 "Non-Disclosure Agreement" and a 2013 "Content Integration Agreement" ("Content Integration Agreement"). Sonos admits that this paragraph quotes, in part, language from these documents. Sonos denies that these quotations fully and fairly summarize these documents and therefore denies any remaining allegations in this paragraph concerning these documents. Sonos currently lacks knowledge or information sufficient to form a belief as to the truth or falsity as to the remaining allegations in this paragraph and therefore denies them.

22. Sonos admits that this paragraph quotes, in part, language from the Content Integration Agreement. Sonos denies that these quotations fully and fairly summarize the Content Integration Agreement and therefore denies any allegations in this paragraph.

23. Sonos admits that this paragraph quotes, in part, language from the Content Integration Agreement. Sonos denies that these quotations fully and fairly summarize the Content Integration Agreement and therefore denies any allegations in this paragraph.

### **ALLEGATIONS CONCERNING**

### **SONOS AND GOOGLE COLLABORATE ON CLOUD QUEUE**

24. Sonos admits that the parties collaborated to deliver product features concerning Google Play Music, including between 2013 and 2015 ("Sonos-Google Collaboration"). Sonos denies any remaining allegations of this paragraph.

1           25.     Sonos admits that this paragraph quotes, in part, from what purports to be an email  
2 exchange between a Sonos employee and a Google employee. Sonos further admits that Tad  
3 Coburn is a named inventor of the '615 and '033 Patents. However, Sonos denies that these  
4 quotations fully and fairly summarize the parties' collaboration and therefore denies any remaining  
5 allegations in this paragraph.

6           26.     Sonos currently lacks knowledge or information sufficient to form a belief as to the  
7 truth or falsity as to the allegations in this paragraph and therefore denies them.

8           27.     Sonos admits that this paragraph quotes, in part, from what purports to be an email  
9 exchange between a Sonos employee and a Google employee. Sonos denies that these quotations  
10 fully and fairly summarize the parties' collaboration and therefore denies any allegations in this  
11 paragraph.

12          28.     Sonos admits that this paragraph quotes, in part, from what purports to be an email  
13 exchange between a Sonos employee and a Google employee. Sonos denies that these quotations  
14 fully and fairly summarize the parties' collaboration and therefore denies any allegations in this  
15 paragraph.

16          29.     Sonos admits that Mr. Coburn was involved in meetings and discussions with  
17 Google employees concerning the Sonos-Google Collaboration. Sonos denies any remaining  
18 allegations of this paragraph.

19          30.     Denied.

20                                   **ALLEGATIONS CONCERNING**  
21 **SONOS WRONGFULLY CLAIMS RIGHTS IN THE CLOUD QUEUE TECHNOLOGY**

22          31.     Sonos admits that this paragraph quotes, in part, from a hearing transcript. Sonos  
23 denies that these quotations fully and fairly characterize the content and scope of the '615 and '033  
24 Patents. Sonos denies any remaining allegations in this paragraph.

25          32.     Sonos currently lacks knowledge or information sufficient to form a belief as to the  
26 truth or falsity as to the allegations in this paragraph and therefore denies them.

27          33.     Sonos admits that it has accused Google of infringing the '615 and '033 Patents, at  
28 least via Google Play Music on iOS and Android devices being capable of carrying out certain

1 functionality in connection with Google media players. Sonos denies any remaining allegations of  
2 this paragraph.

3 34. Denied.

4 **ALLEGATIONS CONCERNING**  
5 **GOOGLE DOES NOT INFRINGE THE PATENTS-IN-SUIT**

6 35. Denied.

7 36. Denied.

8 **FIRST COUNT**  
9 **(Declaration of Noninfringement of 9,967,615)**

10 37. Sonos reasserts and incorporates its responses to paragraphs 1 through 36 of the  
11 Second Amended Complaint.

12 38. Sonos admits that it owns all rights, title, and interest in and under the '615 Patent.  
13 Sonos admits that Exhibit 7 purports to be a true and correct copy of the '615 Patent.

14 39. Denied.

15 40. Sonos admits that this paragraph purports to quote, in part, from the claims of the  
16 '615 Patent. Sonos denies any remaining allegations of this paragraph.

17 41. Denied.

18 42. Sonos admits that there is a justiciable controversy between Sonos and Google  
19 concerning the '615 Patent. Sonos denies any remaining allegations of this paragraph.

20 43. Sonos admits that Google purports to seek a judgment declaring that it does not  
21 infringe the '615 Patent. Sonos denies any remaining allegations of this paragraph.

22 **SECOND COUNT**  
23 **(Declaration of Invalidity of 9,967,615)**

24 44. Sonos reasserts and incorporates its responses to paragraphs 1 through 43 of the  
25 Second Amended Complaint.

26 45. Sonos admits that there is a justiciable controversy between Sonos and Google  
27 concerning the '615 Patent. Sonos denies any remaining allegations of this paragraph.

28 46. Denied.

1 47. Denied.

2 48. Sonos admits that Google purports to seek a judgment declaring that the '615 Patent  
3 is invalid. Sonos denies any remaining allegations of this paragraph.

4 **THIRD COUNT**

5 **(Declaration of Noninfringement of 10,779,033)**

6 49. Sonos reasserts and incorporates its responses to paragraphs 1 through 48 of the  
7 Second Amended Complaint.

8 50. Sonos admits that it owns all rights, title, and interest in and under the '033 Patent.  
9 Sonos admits that Exhibit 8 purports to be a true and correct copy of the '033 Patent.

10 51. Denied.

11 52. Sonos admits that this paragraph purports to quote, in part, from the claims of the  
12 '033 Patent. Sonos denies any remaining allegations of this paragraph.

13 53. Denied.

14 54. Sonos admits that there is a justiciable controversy between Sonos and Google  
15 concerning the '033 Patent. Sonos denies any remaining allegations of this paragraph.

16 55. Sonos admits that Google purports to seek a judgment declaring that it does not  
17 infringe the '033 Patent. Sonos denies any remaining allegations of this paragraph.

18 **FOURTH COUNT**

19 **(Declaration of Invalidity of 10,779,033)**

20 56. Sonos reasserts and incorporates its responses to paragraphs 1 through 55 of the  
21 Second Amended Complaint.

22 57. Sonos admits that there is a justiciable controversy between Sonos and Google  
23 concerning the '033 Patent. Sonos denies any remaining allegations of this paragraph.

24 58. Denied.

25 59. Denied.

26 60. Sonos admits that Google purports to seek a judgment declaring that the '033 Patent  
27 is invalid. Sonos denies any remaining allegations of this paragraph.

**FIFTH COUNT**

**(Declaration of Noninfringement of 10,469,966)**

61. Sonos notes that Google’s incorporation of “paragraphs 1 through 72” into paragraph 61 of the Second Amended Complaint is inappropriate, improper, and makes no sense. As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical error and Google meant to incorporate paragraphs 1-60, then Sonos reasserts and incorporates its responses to paragraphs 1 through 60 of the Second Amended Complaint.

62. Sonos admits that it owns all rights, title, and interest in and under the ’966 Patent. Sonos admits that Exhibit 9 purports to be a true and correct copy of the ’966 Patent.

63. Denied.

64. Sonos admits that this paragraph purports to quote, in part, from the ’966 Patent. Sonos denies any remaining allegations of this paragraph.

65. Denied.

66. Sonos admits that there is a justiciable controversy between Sonos and Google concerning the ’966 Patent. Sonos denies any remaining allegations of this paragraph.

67. Sonos admits that Google purports to seek a judgment declaring that it does not infringe the ’966 Patent. Sonos denies any remaining allegations of this paragraph.

**SIXTH COUNT**

**(Declaration of Invalidity of 10,469,966)**

68. Sonos notes that Google’s incorporation of “paragraphs 1 through 79” into paragraph 68 of the Second Amended Complaint is inappropriate, improper, and makes no sense. As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical error and Google meant to incorporate paragraphs 1-67, then Sonos reasserts and incorporates its responses to paragraphs 1 through 67 of the Second Amended Complaint.

69. Sonos admits that there is a justiciable controversy between Sonos and Google concerning the ’966 Patent. Sonos denies any remaining allegations of this paragraph.

70. Denied.

71. Denied.



72. Sonos admits that Google purports to seek a judgment declaring that the '966 Patent is invalid. Sonos denies any remaining allegations of this paragraph.

### **SEVENTH COUNT**

#### **(Declaration of Noninfringement of 10,848,885)**

73. Sonos notes that Google's incorporation of "paragraphs 1 through 84" into paragraph 73 of the Second Amended Complaint is inappropriate, improper, and makes no sense. As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical error and Google meant to incorporate paragraphs 1-72, then Sonos reasserts and incorporates its responses to paragraphs 1 through 72 of the Second Amended Complaint.

74. Sonos admits that it owns all rights, title, and interest in and under the '885 Patent. Sonos admits that Exhibit 10 purports to be a true and correct copy of the '885 Patent.

75. Denied.

76. Sonos admits that this paragraph purports to quote, in part, from the '885 Patent. Sonos denies any remaining allegations of this paragraph.

77. Denied.

78. Sonos admits that there is a justiciable controversy between Sonos and Google concerning the '885 Patent. Sonos denies any remaining allegations of this paragraph.

79. Sonos admits that Google purports to seek a judgment declaring that it does not infringe the '885 Patent. Sonos denies any remaining allegations of this paragraph.

### **EIGHTH COUNT**

#### **(Declaration of Invalidity of 10,848,885)**

80. Sonos notes that Google's incorporation of "paragraphs 1 through 91" into paragraph 80 of the Second Amended Complaint is inappropriate, improper, and makes no sense. As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical error and Google meant to incorporate paragraphs 1-79, then Sonos reasserts and incorporates its responses to paragraphs 1 through 79 of the Second Amended Complaint.

81. Sonos admits that there is a justiciable controversy between Sonos and Google concerning the '885 Patent. Sonos denies any remaining allegations of this paragraph.

1           82.    Denied.

2           83.    Denied.

3           84.    Sonos admits that Google purports to seek a judgment declaring that the '885 Patent  
4 is invalid. Sonos denies any remaining allegations of this paragraph.

5                                   **NINTH COUNT**

6                                   **(Breach of Contract)**

7           85.    Sonos notes that Google's incorporation of "paragraphs 1 through 94" into  
8 paragraph 85 of the Second Amended Complaint is inappropriate, improper, and makes no sense.  
9 As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical  
10 error and Google meant to incorporate paragraphs 1-84, then Sonos reasserts and incorporates its  
11 responses to paragraphs 1 through 84 of the Second Amended Complaint.

12          86.    Sonos agrees that Google and Sonos executed a document referred to by Google as  
13 the Content Integration Agreement. The remainder of this paragraph contains legal conclusions  
14 and arguments to which no response is required. But to the extent a response is required, Sonos  
15 denies the allegations in this paragraph.

16          87.    This paragraph contains legal conclusions and arguments to which no response is  
17 required. But to the extent a response is required, Sonos denies the allegations in this paragraph.

18          88.    Sonos currently lacks knowledge or information sufficient to form a belief as to the  
19 truth or falsity as to the allegations in this paragraph and therefore denies them.

20          89.    Denied.

21          90.    Denied.

22          91.    Denied.

23          92.    Sonos denies that it has breached. Sonos currently lacks knowledge or information  
24 sufficient to form a belief as to the truth or falsity as to the remaining allegations in this paragraph  
25 and therefore denies them.

26          93.    Denied.

**TENTH COUNT****(Conversion)**

94. Sonos notes that Google's incorporation of "paragraphs 1 through 108" into paragraph 85 of the Second Amended Complaint is inappropriate, improper, and makes no sense. Indeed, there are no paragraphs numbered 98-108 in the Second Amended Complaint. As such, Sonos denies the allegations of this paragraph. To the extent that this is a typographical error and Google meant to incorporate paragraphs 1-93, then Sonos reasserts and incorporates its responses to paragraphs 1 through 93 of the Second Amended Complaint.

95. Denied.

96. Sonos admits that it is the owner of the '033 Patent. Sonos denies the remaining allegations of this paragraph.

97. Sonos denies that it has converted anything. Sonos currently lacks knowledge or information sufficient to form a belief as to the truth or falsity as to the remaining allegations in this paragraph and therefore denies them.

**PRAYER FOR RELIEF**

The paragraphs under the "Prayer for Relief" heading sets forth the statement of relief requested by Google, to which no response is required. Sonos denies that Google is entitled to any of its requested relief, and denies any allegations in these paragraphs.

**DEMAND FOR JURY TRIAL**

Sonos acknowledges Google's demand for a trial by jury and likewise demands a trial by jury on all issues so triable.

**AFFIRMATIVE DEFENSES**

Subject to the responses above, Sonos alleges and asserts the following defenses in response to the allegations, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein. In addition to the affirmative defenses described below, subject to its responses above, Sonos reserves all rights to allege additional affirmative defenses, at law or in equity, that may exist now or may be available in the future based on discovery and further investigation in this action.

**FIRST DEFENSE: UNCLEAN HANDS**

1  
2           1.       To the extent that Google succeeds in establishing that the Content Integration  
3 Agreement was an enforceable agreement at the time of the alleged breach, Google's relief is  
4 precluded at least on grounds of unclean hands because Google engaged in unconscionable, bad  
5 faith, and inequitable conduct at the time the Content Integration Agreement was executed and  
6 during the time that Google alleges the Content Integration Agreement was allegedly in force.

7           2.       Google executed the Content Integration Agreement and participated in the  
8 collaboration with Sonos while intending to introduce products that would directly compete with  
9 Sonos, including a line of all-in-one wireless multi-room audio players and apps that implement  
10 Sonos's patented functionality. At no point prior to executing the Content Integration Agreement  
11 or during this integration work did Google inform Sonos of this intention.

12           3.       Google used the information that Sonos shared with Google during the collaboration  
13 to develop products that would directly compete with Sonos, including a line of all-in-one wireless  
14 multi-room audio players and apps that implement Sonos's patented functionality. At no point  
15 prior to executing the Content Integration Agreement or during this integration work did Google  
16 inform Sonos that it would use or was using the information that Sonos shared with Google in this  
17 way.

18           4.       According to Google's own allegations, the technology developed in the course of  
19 the parties' collaboration "is in relevant respects, analogous to technology that Sonos now accuses  
20 of infringing its patents." SAC at ¶ 32. Under Google's own interpretation and allegation, Google  
21 used technology developed in furtherance of the Content Integration Agreement's "Integrated  
22 Service Offering" (i.e., technology developed that allows users of the Google Play Music service  
23 to play music on or through the Sonos Music System) in a context outside the scope of the  
24 "Integrated Service Offering," namely in products that would directly compete with Sonos,  
25 including a line of all-in-one wireless multi-room audio players and apps that implement Sonos's  
26 patented functionality. At no point prior to executing the Content Integration Agreement or during  
27 this integration work did Google inform Sonos that it was using or intended to use the developed  
28 technology in this way.

1           5.       Sonos launched its first commercial products in 2005 and has since released a wide  
2 variety of critically acclaimed, patented, wireless multi-room audio products, including, for  
3 example, the Play:1, Play:3, Play:5 (Gen 1 and Gen 2), One (Gen 1 and Gen 2), One SL, Move,  
4 Playbar, Playbase, Beam, Sub, Connect, Port, Connect:Amp, Amp, Five, and Arc. *See, e.g.*, Ex. G.

5           6.       By the 2010s, Google had taken notice of Sonos's success and sought to emulate it  
6 for itself. Indeed, in 2011, Google engineer Debajit Ghosh reached out to then Sonos employee  
7 Joni Hoadley – a named inventor for the '615 and '033 Patents – inquiring as to many facets of the  
8 Sonos system, including how to push track URLs to devices, how device authentication takes place,  
9 how a server can send track metadata to devices, how client caching works, and further requesting  
10 to review Sonos APIs and any Sonos whitepapers that further explain how the system works. Ex.  
11 AR (SONOS-SVG2-00040234-235).

12           7.       Then, in June 2012, Google unveiled a product called the “Nexus Q” – a networked  
13 music streaming device. Google purportedly distributed samples of this device at the 2012 Google  
14 I/O developer conference. But in January 2013, the Nexus Q was quietly shelved and support for  
15 the device was phased out beginning in May 2013. While the Nexus Q was available for pre-order,  
16 the Nexus Q was never commercially sold. *See, e.g.*, Ex. CF ([https://www.theverge.com](https://www.theverge.com/2012/6/29/3125551/google-nexus-q-review)  
17 [/2012/6/29/3125551/google-nexus-q-review](https://www.theverge.com/2012/6/29/3125551/google-nexus-q-review)).

18           8.       Meanwhile, Google was having mixed success with its free music streaming app,  
19 originally called “Google Music” (since rebranded as “Google Play Music”). *See* Ex. CG  
20 (<https://www.cnet.com/news/google-music-not-living-up-to-expectations-exclusive/>). In  
21 May 2013, Google announced “Google Play Music All Access” – a paid version of the Google Play  
22 Music streaming service.

23           9.       At this time, several of Google's engineers and executives were owners of Sonos  
24 products and had repeatedly marveled at Sonos's technology implemented in its products. *See,*  
25 *e.g.*, Ex. AQ (SONOS-SVG2-00040220) (Google engineer, Chris Yerga, exclaiming that “[w]hen  
26 I moved [to Japan] I brought clothes, toothpaste and a Play:5. I see those as the bare necessities  
27 :)”). And the press was questioning Google as to whether Google's music service would be  
28 available on Sonos's music system. Ex. AQ (SONOS-SVG2-00040220) (acknowledging that one

1 of the “most popular questions” Google received at the Google Play Music All Access  
 2 announcement was about whether Google Play Music and Google Play Music All Access would  
 3 support Sonos products). All of this further fueled Google’s desire to emulate Sonos and release  
 4 its own wireless multi-room audio players.

5 10. In furtherance of this, Google sought to integrate with Sonos and learn more about  
 6 Sonos’s music system. For instance, Google engineer, Chris Yerga, noted that around the time of  
 7 Google Play Music All Access’s launch in 2013, Google was “talking [] internally” about “Sonos  
 8 integration,” and acknowledged that Sonos shared its “vision” with him “a couple years ago.” Ex.  
 9 AQ (SONOS-SVG2-00040220). Not long after this, Google engineer Hugo Barra reached out to  
 10 then Sonos CEO, Jon MacFarlane, to schedule a meeting to “do a product and technical deep dive  
 11 on Sonos/Google integration.” Ex. AS (SONOS-SVG2-00040228-229).

12 11. In July 2013, Google executive Hugo Barra and Google engineers Dave Burke and  
 13 Debajit Ghosh met with Sonos engineers and executives, Nick Millington, Tom Cullen, Andrew  
 14 Schulert, and Ron Kuper to discuss a Sonos – Google integration through which Google Play Music  
 15 would be added as a music service to the Sonos system and the Google Play Music app would be  
 16 able to play music directly to Sonos players. *See, e.g.*, Ex. AT (SONOS-SVG2-00040230-233).  
 17 For playing music directly to Sonos players using the Google Play Music app, the intent was to  
 18 utilize an implementation referred to as “[REDACTED]”.

19 12. To facilitate this integration, beginning in July 2013, Sonos provided Google with  
 20 unique insight into how the Sonos wireless multi-room products functioned. Among other things,  
 21 Sonos provided Google with samples of Sonos products to test, access to Sonos API code, API  
 22 documentation, and detailed descriptions on how to implement zone group functionality, discovery  
 23 of zone groups, and group volume functionality, among others. *See, e.g.* Ex. AU (SONOS-SVG2-  
 24 00040199) (attachment at Ex. AV (SONOS-SVG2-00042466-469)); Ex. AW (SONOS-SVG2-  
 25 00040198) (attachment at Ex. AX (SONOS-SVG2-00042462-465)); Ex. AY (SONOS-SVG2-  
 26 00040195-197) (attachments at Ex. AZ (SONOS-SVG2-00042454-457), Ex. BA (SONOS-SVG2-  
 27 00042458-461)); Ex. BB (SONOS-SVG2-00040194) (attachments at Ex. BC (SONOS-SVG2-  
 28 00042451-452), Ex. BD (SONOS-SVG2-00042453)); Ex. AT (SONOS-SVG2-00040230-233);

1 Ex. BF (SONOS-SVG2-00040227); Ex. BG (SONOS-SVG2-00040238-241) (attachment at Ex.  
 2 BH (SONOS-SVG2-00042476)); Ex. BI (SONOS-SVG2-00040236-237) (attachment at Ex. BJ  
 3 (SONOS-SVG2-00042471-475)).

4 13. Amidst this integration partnership, Google launched its first-generation  
 5 Chromecast product in July 2013 – a wireless video streaming device utilizing Google’s “cast”  
 6 technology. Armed with the knowledge of Sonos’s success with wireless multi-room audio  
 7 products, Google set its sights on extending the Chromecast product to wireless multi-room audio  
 8 and eventually to stand-alone all-in-one playback devices. To achieve this, Google set out to  
 9 develop “Cast For Audio.” Ex. BK (SONOS-SVG2-00040226) (Google engineer, Micah Collins,  
 10 reaching out to inform Sonos that [REDACTED])

11 14. But Google knew that it could not deliver a successful wireless multiroom audio  
 12 product without utilizing Sonos’s technology for, among other things, grouping networked audio  
 13 devices and synchronizing playback of streaming media content. Ex. BE (SONOS-SVG2-  
 14 00040219) (memorializing conversation with Sundar Pichai, in which (i) Sundar explained that “he  
 15 is confident Cast is good for video and less confident they have thought though Audio and was  
 16 hoping that’s where [Sonos] could help.”). Indeed, Google’s engineers lacked experience with  
 17 wireless multiroom audio, and it was simply too tempting at this point to copy this technology from  
 18 Sonos, rather than start from scratch. *Id.*

19 15. Google thus entered into the collaboration and continued to work with Sonos under  
 20 the guise that Sonos products would be the beneficiary of a “Cast For Audio” platform that would  
 21 allow users to play audio from Android applications on Sonos devices. But instead, Google used  
 22 what it was learning from Sonos to implement its own version of Sonos’s products – without  
 23 Sonos’s knowledge. *See, e.g.,* Ex. BK (SONOS-SVG2-00040226) (Google engineer, Micah  
 24 Collins, noting “[REDACTED]”;  
 25 [REDACTED]”; Ex. BL (SONOS-  
 26 SVG2-00040224) (memorializing conversation with Jamie Rosenberg indicating that Sundar  
 27 Pichai decided that Dave Burke – who previously was overseeing the Sonos implementation with  
 28 MRP – would now be “heavily involved in development of Cast”; Ex. BE (SONOS-SVG2-



00040219) (memorializing conversation with Sundar Pichai, in which (i) Sundar explained that the Cast team needed help in audio, and Sonos should find a good reception there, (ii) Sundar wants Sonos “to help the Cast team nail the right audio solution and [] is interested in [Sonos’s] commitment[,]” (iii) “Sundar is a Sonos user. Relatively recently but very happy and was just in the process of adding a SUB. His pet missing feature is Grouping Players . . . in Google play,” (iv) “[Sundar] is a music fan and his family is very happy with the Sonos [system],” and (v) “[Sundar] is confident Cast is good for video and less confident they have thought though Audio and was hoping that’s where [Sonos] could help.”).

16. Leading up to a June 2014 meeting between Sonos and Google, Sonos even shipped the Google executive in charge of Google Home, Mario Queiroz, several Sonos Play:1 devices to test out. *See* Ex. BN (SONOS-SVG2-00040218). And at the June 2014 meeting between Sonos (Nick Millington, Marc Whitten, Tad Coburn, Andy Schulert, and Ben Smith) and Google (Mario Queiroz, Majd Bakar, Rishi Chandra, Michael Sundermeyer, Tomer Shekel, Suveer Kothari, Adrienns McCallister, Matt Stuart), Sonos openly shared its vision for the “modern audio platform,” which included among other concepts, Sonos’s multiroom grouping architecture. Ex. BM (SONOS-SVG2-00040200-217).

17. To Sonos’s surprise and disappointment, Google, in 2015, released its Chromecast Audio product and shortly thereafter added a major feature update to include wireless multiroom functionality to this product. This was designed to directly compete with Sonos and to undermine the very product that the parties were collaborating on pursuant to the Content Integration Agreement.

18. The press immediately noted how this “major feature update” made Google’s product even more “like the ones made by Sonos:”

Google’s recently-launched Chromecast Audio adapter is getting a major feature update this week: Consumers will now be able to group multiple Chromecast audio adapters to stream their favorite music simultaneously in more than one room, similar to the multi-room support available for internet-connected loudspeakers like the ones made by Sonos.



1 Ex. L (2015 *Variety* article entitled “Google’s Chromecast Audio Adapter Gets Multi-Room  
2 Support Similar to Sonos”); *see also* Ex. M (2015 Pocket-Lint) (“You control your Sonos  
3 experience with one app. Well, thanks to a new software rollout, Chromecast Audio can pretty  
4 much do the same thing.”).

5 19. Since 2015, Google has expanded its wireless multi-room audio product line to more  
6 than a dozen infringing products, including the Google Home Mini, Google Home, Google Home  
7 Max, and Pixel phones, tablets, and laptops. For example, in 2016 (a year after Google launched  
8 Chromecast Audio), Google released the Google Home multi-room audio player (which was  
9 controlled by Google’s rebranded multi-room controller app – the Google Home app). Unlike the  
10 Chromecast Audio, the Google Home added an internal speaker driver making it an “all-in-one”  
11 audio player akin to Sonos’s prior Play:1, Play:3, and Play:5 products.

12 20. Accordingly, Google had executed the Content Integration Agreement and  
13 continued its collaboration with Sonos while intending to introduce a competitive wireless multi-  
14 room product, including a line of all-in-one players and apps that implement Sonos’s patented  
15 functionality intended to directly compete with Sonos. Neither prior to executing the Content  
16 Integration Agreement, nor at any point during this integration work did Google inform Sonos of  
17 this intention.

18 21. Google used the information that Sonos shared with Google during the collaboration  
19 to develop a competitive wireless multi-room product, including a line of all-in-one players and  
20 apps that implement Sonos’s patented functionality intended to directly compete with Sonos.  
21 Neither prior to executing the Content Integration Agreement, nor at any point during this  
22 integration work, did Google inform Sonos that it was using the information that Sonos shared with  
23 Google in this way.

24 22. The Content Integration Agreement states that:

25 [REDACTED]  
26 [REDACTED]  
27 [REDACTED]  
28 [REDACTED]

1 SAC, Ex. 3 at 1. According to Google’s own allegations, the technology developed in the course  
 2 of the parties’ collaboration “is in relevant respects, analogous to technology that Sonos now  
 3 accuses of infringing its patents.” SAC at ¶ 32. Under Google’s own interpretation and allegation,  
 4 Google used technology developed in furtherance of the Integrated Service Offering (i.e.,  
 5 technology developed that allows users of the Google Play Music service to play music on or  
 6 though the Sonos Music System) in a context outside of the Integrated Service Offering, namely in  
 7 competitive wireless multi-room products, including a line of all-in-one players and apps that  
 8 implement Sonos’s patented functionality intended to directly compete with Sonos. Neither prior  
 9 to executing the Content Integration Agreement, nor at any point during this integration work did  
 10 Google inform Sonos that it was using or intended to use the developed technology in this way.

11 23. In view of at least the foregoing, Google engaged in unconscionable, bad faith, and  
 12 inequitable conduct both at the time the Content Integration Agreement was executed and during  
 13 the time that Google alleges the Content Integration Agreement was allegedly in force. Google’s  
 14 relief is thus precluded on grounds of unclean hands.

### 15 **SECOND DEFENSE: FRUSTRATION OF PURPOSE**

16 24. Sonos reasserts and incorporates its paragraphs 1 through 23 above.

17 25. To the extent that Google succeeds in establishing that the Content Integration  
 18 Agreement was an enforceable agreement at the time of the alleged breach, Google’s relief is  
 19 precluded at least on grounds that Google’s actions set forth above have frustrated the purpose of  
 20 the Content Integration Agreement.

21 26. At the time the Content Integration Agreement was executed, Google understood  
 22 that Sonos’s purpose for executing the Content Integration Agreement and sharing information with  
 23 Google concerning Sonos’s Music System over the course of the collaboration was that this  
 24 information and the parties’ work would be used to produce the “Integrated Service Offering” –  
 25 which the Content Integration Agreement defines as “an application that allows consumers of the  
 26 Sonos MMS to directly access, control and play content provided by the Music Service on or  
 27 through the Sonos MMS” – and not to assist Google in developing a competitive wireless multi-  
 28

1 room product, let alone a line of all-in-one players and apps that implement Sonos's patented  
2 functionality intended to directly compete with Sonos.

3 27. Due to these actions, Sonos failed to receive the benefit of its bargain and indeed  
4 was severely harmed as a result of Google's actions.

5 28. Google's actions were not foreseeable at the time the parties executed the Content  
6 Integration Agreement, could not have been guarded against by the Content Integration Agreement,  
7 and were not caused by Sonos.

8 **THIRD DEFENSE: BREACH OF GOOD FAITH AND FAIR DEALING**

9 29. Sonos reasserts and incorporates its paragraphs 1 through 29 above.

10 30. To the extent that Google succeeds in establishing that the Content Integration  
11 Agreement was an enforceable agreement at the time of the alleged breach, Google's relief is  
12 precluded at least on grounds that Google breached the implied covenant of good faith and fair  
13 dealing as a result of Google's actions set forth above.

14 31. At a minimum, Google breached the implied covenant of good faith and fair dealing  
15 by executing the Content Integration Agreement and continuing its collaboration with Sonos while  
16 intending to introduce a competitive wireless multi-room product, including a line of all-in-one  
17 players and apps that implement Sonos's patented functionality intended to directly compete with  
18 Sonos. This breach was exacerbated by Google failing to inform Sonos of this intention.

19 32. At a minimum, Google breached the implied covenant of good faith and fair dealing  
20 by using the information that Sonos shared with Google during the collaboration to develop a  
21 competitive wireless multi-room product, including a line of all-in-one players and apps that  
22 implement Sonos's patented functionality intended to directly compete with Sonos. This breach  
23 was exacerbated by Google failing to inform Sonos it was using the information that Sonos shared  
24 with Google in this way.

25 33. At a minimum, Google breached the implied covenant of good faith and fair dealing  
26 under Google's own allegations that the technology developed in the course of the parties'  
27 collaboration "is in relevant respects, analogous to technology that Sonos now accuses of infringing  
28 its patents." SAC at ¶ 32. Under Google's own interpretation and allegations, Google used

1 technology developed in furtherance of the Integrated Service Offering (i.e., technology developed  
 2 that allows users of the Google Play Music service to play music on or though the Sonos Music  
 3 System) in a context outside of the Integrated Service Offering, namely in competitive wireless  
 4 multi-room products, including a line of all-in-one players and apps that implement Sonos's  
 5 patented functionality intended to directly compete with Sonos. This breach was exacerbated by  
 6 Google failing to inform Sonos that it was using or intended to use the developed technology in  
 7 this way.

#### 8 **FOURTH DEFENSE: NOVATION ONE**

9 34. Sonos reasserts and incorporates its paragraphs 1 through 34 above.

10 35. To the extent that Google succeeds in establishing that the Content Integration  
 11 Agreement was at any time an enforceable agreement, Google's relief is precluded at least on  
 12 grounds of novation.

13 36. On December 14, 2015, Google executed an "API EVALUATION AND  
 14 DEVELOPMENT LICENSE AGREEMENT" (hereinafter "API Eval Agreement"). Ex. BO.

15 37. The Recitals of the API Eval Agreement state, in part:

16 [REDACTED]  
 17 [REDACTED]  
 18 [REDACTED]  
 19 [REDACTED]  
 20 [REDACTED]  
 21 [REDACTED]  
 22 [REDACTED]  
 23 [REDACTED]  
 24 [REDACTED]  
 25 [REDACTED]

26 Ex. BO at 1.

27 38. Section 7.2 of the API Eval Agreement states:  
 28

1 [REDACTED]  
 2 [REDACTED]  
 3 [REDACTED]  
 4 *Id.* at 3.

5 39. The subject matter of the API Eval Agreement and the subject matter of the Content  
 6 Integration Agreement are, for the relevant purposes, substantially the same insofar as the purpose  
 7 of the Content Integration Agreement was to develop an app that “[REDACTED]  
 8 [REDACTED]” and the purpose of the API Eval  
 9 Agreement was “[REDACTED]  
 10 [REDACTED].” *Compare* SAC, Ex. 3 at 1 with Ex. BO at 1.

11 40. The API Eval Agreement supersedes the Content Integration Agreement and  
 12 extinguished Sonos’s obligations, if any, under the Content Integration Agreement. Therefore, at  
 13 least as of December 14, 2015, the Content Integration Agreement was unenforceable.

14 **FIFTH DEFENSE: NOVATION TWO**

15 41. Sonos reasserts and incorporates its paragraphs 1 through 40 above.

16 42. To the extent that Google succeeds in establishing that the Content Integration  
 17 Agreement was an enforceable agreement at the time of the alleged breach, Google’s relief is  
 18 precluded at least on grounds of novation.

19 43. On December 12, 2018, Google executed a “Service Integration Agreement.”  
 20 Ex. BP.

21 44. The Recitals of the Service Integration Agreement state, in part:

22 [REDACTED]  
 23 [REDACTED]  
 24 [REDACTED]  
 25 [REDACTED]  
 26 [REDACTED]  
 27 [REDACTED]  
 28 *Id.* at 1.

1           45.     Section 12.8 of the Service Integration Agreement states:

2           [REDACTED]

3           [REDACTED]

4           [REDACTED].

5     *Id.* at 11.

6           46.     The subject matter of the Service Integration Agreement and the subject matter of

7     the Content Integration Agreement are, for the relevant purposes, substantially the same insofar as

8     the purpose of the Content Integration Agreement was to develop an app that “[REDACTED]

9     [REDACTED]” and the purpose of

10    the Service Integration Agreement was “[REDACTED]

11    [REDACTED]

12    [REDACTED]” *Compare*

13    SAC, Ex. 3 at 1 *with* Ex. BP at 1.

14           47.     The Service Integration Agreement supersedes the Content Integration Agreement

15    and extinguished Sonos’s obligations, if any, under the Content Integration Agreement. Therefore,

16    at least as of December 12, 2018, the Content Integration Agreement was unenforceable.

17                               **SIXTH DEFENSE: WAIVER**

18           48.     Sonos reasserts and incorporates its paragraphs 1 through 47 above.

19           49.     To the extent that Google succeeds in establishing that the Content Integration

20    Agreement was an enforceable agreement at the time of the alleged breach, Google’s relief is

21    precluded at least on grounds that Google waived any right to relief.

22           50.     Google alleges that Sonos breached the Content Integration Agreement by

23    “‘claim[ing] for itself or for any third party any right, title, interest or licenses to the’ cloud queue

24    technology.” SAC at ¶¶ 30-31. Google alleges that Sonos so claimed for itself this technology as

25    a result of Sonos, on November 1, 2019 introducing a claim amendment into the ’033 Patent

26    application that recited “remote playback queue.”

27           51.     However, several years before this amendment and during the time that Google

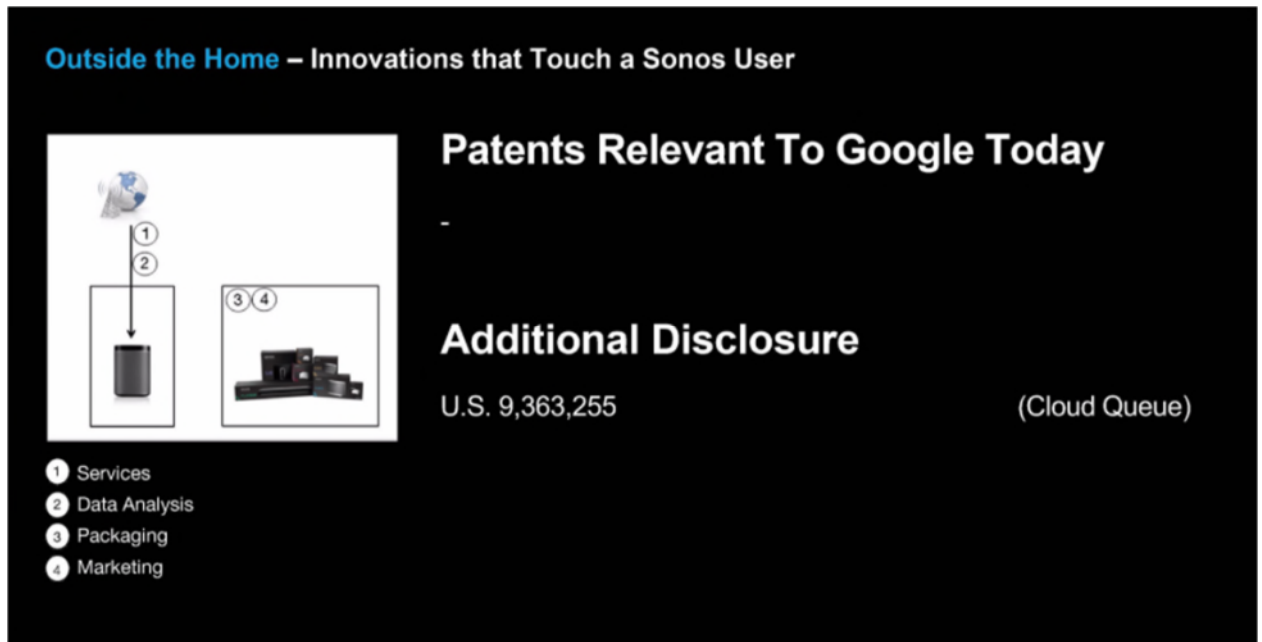
28    alleges the Content Integration Agreement to have been enforceable, Sonos brought to the attention

1 of Google that Sonos had filed patent applications, and received patent grants, directed to “cloud  
2 queue” technology. Additionally, several years before this amendment and during the time that  
3 Google alleges the Content Integration Agreement to have been enforceable, Sonos brought to the  
4 attention of Google that Sonos had filed patent applications, and received patent grants, that share  
5 a specification with the ’033 Patent.

6 52. For instance, on September 2, 2016, Sonos sent John LaBarre and Allen Lo at  
7 Google a document identifying 24 issued Sonos patents and 4 allowed Sonos patent applications,  
8 including U.S. Pat. No. 9,363,255, titled “Cloud Queue Playhead” and U.S. Pat. App.  
9 No. 14/520,566, which shares a common specification with the ’033 Patent. Ex. BY.

10 53. Additionally, on October 13, 2016, Sonos sent John LaBarre, Allen Lo, and Louis  
11 Sorell at Google a document identifying 22 issued Sonos patents and 6 allowed Sonos patent  
12 applications, including U.S. Pat. No. 9,363,255, titled “Cloud Queue Playhead” and U.S. Pat. App.  
13 No. 14/520,566, which shares a common specification with the ’033 Patent. Ex. BZ. In the  
14 document, Sonos articulated that it believed Google products practiced certain Sonos patents  
15 because they included “[v]arious selected ‘vertical’ playback system features including . . .  
16 cloud-based queues.” *Id.* at 3.

17 54. Additionally, on October 26, 2016, Sonos sent John LaBarre at Google a  
18 PowerPoint presentation identifying 29 issued Sonos patents and 3 allowed Sonos patent  
19 applications including U.S. Pat. No. 9,363,255, titled “Cloud Queue Playhead” and U.S. Pat. App.  
20 No. 14/520,566, which shares a common specification with the ’033 Patent. Ex. CA. In the  
21 presentation, Sonos specifically articulated that Sonos’s U.S. Pat. No. 9,363,255 was a “Cloud  
22 Queue” patent.



55. Additionally, On January 31, 2018, Sonos sent Matthew Gubiotti at Google a PowerPoint presentation identifying 16 issued Sonos patents and 1 allowed Sonos patent application. Ex. CB. In the presentation, Sonos specifically identified that there was “Sonos patent subject matter relevant to Google Home” that included “Cloud queue.” *Id.* at 11.

56. Additionally, on July 12, 2018, Sonos sent John LaBarre and Matthew Gubiotti at Google a document identifying 58 issued Sonos patents, including U.S. Pat. Nos. 9,654,459 and 9,942,215, titled “Cloud Queue Synchronization Protocol,” U.S. Pat. Nos. 9,363,255 and 9,648,071, titled “Cloud Queue Playhead,” and U.S. Pat. No. 9,860,589, which shares a common specification with the ’033 Patent. Ex. CC.

57. On February 22, 2019, Sonos sent Matthew Gubiotti, Bradley Riel, and Tim Kowalski at Google a letter enclosing a link to an electronic repository containing 100 claim charts detailing Google’s infringement of 92 issued Sonos patents and 8 allowed Sonos patent applications. Ex. CD. Among these 100 claim charts were charts detailing Google’s infringement of Sonos’s U.S. Pat. Nos. 9,363,255 (Ex. BS) and 9,648,071 (Ex. BT) (each of which were titled “Cloud Queue Playhead”); and 9,654,459 (Ex. BU) and 9,942,215 (Ex. BV) (each of which were titled “Cloud Queue synchronization Protocol”); 10,116,641 (Ex. BW) (titled “Cloud Queue



Playback Policies on a Graphical User Interface”); and 10,158,619 (Ex. BX) (titled “Cloud Queue Access Control”).

58. On June 13, 2019, Sonos sent Bradley Riel and Tim Kowalski at Google a PowerPoint presentation reiterating the 100 claim charts detailing Google’s infringement of 92 issued Sonos patents and 8 allowed Sonos patent applications sent on February 22, 2019. Ex. CE. In the presentation, Sonos specifically articulated that several Google products infringe Sonos’s “Cloud Queue” patents. Sonos’s “Cloud Queue” patents.

	Max (17 of 25)	Home, Hub, Mini (9 of 16)	Chromecast (9 of 15)
<b>Playback Device (Standalone)</b>			
Playback Device Setup	setup	Setup	setup
Wi-Fi Streaming	cloud queue	cloud queue	cloud queue
Support for only one streaming service	service switch	service switch	service switch
Support for multiple streaming services	direct (Bluetooth switch)	direct (Bluetooth switch)	direct (Bluetooth switch)
Line-in			
Line-out			
Bluetooth			
Control Interface (SW)	guest access	guest access	guest access
Control Interface (H/W)	direct control	direct control	direct control
Power and Power Management	control based on orientation		
Fault Detection/Recovery	power save		
Features Update (SW)	fault based on orientation		
<b>Voice Assistant Device</b>			
Smart Assistant			
Voice Detection	mic based on orientation		
<b>Multi-device Platform</b>			
Multi-device Playback Control (SW)	grouping/synchronization	grouping/synchronization	grouping/synchronization
	group volume	group volume	group volume
	zone scenes	zone scenes	zone scenes
	direct control to group	direct control to group	direct control to group
	group ID	group ID	group ID
Multi-device Playback (SW)	grouping/synchronization	grouping/synchronization	grouping/synchronization
Multi-device Voice	default device	default device	default device
	meta data channel	meta data channel	meta data channel
Smart-home Integration			
Multi-device Networking	GC selection	GC selection	GC selection
	GC switching	GC switching	GC switching
<b>Premium Sound</b>			
Orientation	sound based on orientation		
Bonded Zones	bonded pair		
Custom Transducers			
Calibration	self calibration		
Lossless Streaming			
Sound Field Control	multi-channel sound field		
Custom Amplifiers			
Enclosure			

Cloud Queue

Zone Scenes (Grouping)

Group Volume Control

Confidential and Subject to FRE 408


18

SONOS-SVG2-00043760

**US Patent No.: 9,654,459**  
**Title: Cloud Queue Synchronization Protocol**  
**Priority Date: 6/4/2014**  
**Issue Date: 5/16/2017**

This patent involves a playback device capable of:

1. While playing an audio track from a local queue, sending a request for an indication of audio tracks identified in a cloud queue and an indication of the audio track currently being played by the playback device.
2. Receiving an indication of two or more audio tracks from the cloud queue.
3. Incorporating an indication of at least one of the received audio tracks into the local queue.



**Queueing**

**Overview**

Queueing allows partner applications to better integrate with Cast by providing the following features:

- Support of Google's and partner's cloud queue implementation so externally stored and created queue can be directly loaded into Cast devices.
- Mechanisms that allows pagination of items in the queue rather than loading everything at once, solving our Receiver v2 message size limit issue.
- Support for new messaging such as going to the next item, the previous item, fetching a window of items, as well as getting media information related to a set of queue items.
- Better integration with the Cast eco-system such as Google Home and Google Assistant through new queueing data.
- An easy-to-use QueueManager API that allows insertion, removal, and update of queue items.

Confidential and Subject to FRC 408

SONOS-SVG2-00043783

59. Thus, on no fewer than seven individual instances – three times in 2016, twice in 2018, and twice in 2019 – Sonos brought to Google’s attention the fact that Sonos owned patents directed to “Cloud Queue” technology and that Sonos believed Google infringed these patents. Not once prior to Google presenting a draft of its Second Amended Complaint in late 2021 did Google raise the Content Integration Agreement with Sonos and claim, as a result of these Sonos patents, which are indisputably directed to “Cloud Queue” technology and which Google was indisputably aware of, that Sonos had breached the Content Integration Agreement by “‘claim[ing] for itself or for any third party any right, title, interest or licenses to the’ cloud queue technology.” SAC at ¶¶ 30-31.

60. By failing to raise this with Sonos or otherwise take any action that would demonstrate that Google considered the acquisition of these patents to have breached the Content Integration Agreement, Google intentionally and voluntarily relinquished any right to claim that Sonos’s acquisition or attempted acquisition of patents purportedly directed to “cloud queue technology” was a breach of the Content Integration Agreement. By so failing, for instance, Google demonstrated an intent not to avail itself of any contract remedies associated with Sonos’s acquisition or attempted acquisition of patents purportedly directed to “cloud queue technology.”

**SEVENTH DEFENSE: STATUTE OF LIMITATIONS (BREACH)**

61. Sonos reasserts and incorporates its paragraphs 1 through 60 above.

62. To the extent that Google succeeds in establishing that the Content Integration Agreement was an enforceable agreement at the time of the alleged breach, Google's relief is precluded at least on grounds that the statute of limitations bars Google's relief.

63. The statute of limitations in California for breach of a written contract is four years. *Di Wen v. Greenpoint Mortgage Funding, Inc.*, No. 21-cv-7142, 2021 WL 5449048, at \*2 (N.D. Cal. Nov. 22, 2021) ("[The statute of limitations for] [b]reach of written contract and breach of the implied covenant of good faith and fair dealing [is] four years.") (citing Cal. Civ. Proc. Code § 337(1)).

64. As laid out above, and to the extent that Sonos's acquisition or attempted acquisition of patents purportedly directed to "cloud queue technology" could be considered a breach of the Content Integration Agreement (as Google alleges), Google was put on notice by Sonos that Sonos had acquired or attempted to acquire patents purportedly directed to "cloud queue technology" at least as early as early as September 2, 2016 and at least by October 26, 2016.

65. Google filed its original declaratory judgment action on September 28, 2020. Dkt. 1. In this action, Google claimed non-infringement of several Sonos patents. In this action, Google did not mention the Content Integration Agreement and did not raise any claim for breach of contract or any factual allegations that would allegedly support a breach of contract claim.

66. Google's Second Amended Complaint was the first time that Google claimed that Sonos breached the Content Integration Agreement as a result of Sonos allegedly "claim[ing] for itself or for any third party any right, title, interest or licenses to the' cloud queue technology" by way of Sonos's acquisition or attempted acquisition of patents purportedly directed to "cloud queue technology." SAC at ¶¶ 30-31.

67. Google provided a draft of this Second Amended Complaint, for the first time, to Sonos on November 4, 2021.

68. Google moved the Court for leave to file the Second Amended Complaint on November 16, 2021.

69. The Court granted in-part Google's motion for leave to file the Second Amended Complaint on January 21, 2022.

70. Google filed a revised Second Amended Complaint on February 4, 2022.

71. The Ninth Count (Breach of Contract) set out in Google's Second Amended Complaint and the factual allegations provided in support thereof are not part of the conduct, transaction, or occurrence set out, or attempted to be set out, in Google's original complaint.

72. As such, Google's Ninth Count (Breach of Contract) does not relate back to the date of Google's original complaint and should be considered as if filed on the day that the Second Amended Complaint was filed – February 4, 2022.

73. Under Google's interpretation of what constitutes a breach of the Content Integration Agreement, Google's claim for breach of contract ripened at least as early as September 2, 2016.

74. Alternatively, and assuming Google's claim for breach of contract did not ripen at least as early as September 2, 2016, under Google's interpretation of what constitutes a breach of the Content Integration Agreement, Google's claim for breach of contract ripened at least by October 13, 2016 or at least by October 26, 2016.

75. Because Google did not bring its action for breach of contract prior to September 2, 2020, prior to October 13, 2020, or even prior to October 26, 2020, the statute of limitations bars Google's relief.

76. Even assuming that Google's Ninth Count (Breach of Contract) relates back to the date of Google's original complaint and can be considered as if filed on the day of that original complaint – September 28, 2020, Google's relief is still barred under the statute of limitations because under Google's interpretation of what constitutes a breach of the Content Integration Agreement, Google's claim for breach of contract ripened at least as early as September 2, 2016 and Google failed to bring its action for breach of contract prior to September 2, 2020.

**EIGHTH DEFENSE: STATUTE OF LIMITATIONS (CONVERSION)**

77. Sonos reasserts and incorporates its paragraphs 1 through 76 above.

1           78. To the extent that Google succeeds in establishing the elements of conversion,  
2 Google's relief is precluded at least on grounds that the statute of limitations bars Google's relief.

3           79. The statute of limitations in California for conversion is three years. *Kyko Glob.,*  
4 *Inc. v. Bhongir*, No. 20-cv-4136, 2020 WL 7319360, at \*2 (N.D. Cal. Dec. 11, 2020), *aff'd*,  
5 No. 20-17526, 2021 WL 4958989 (9th Cir. Oct. 26, 2021) ("Under California law, . . . conversion  
6 claims are subject to a three-year statute of limitations, see Cal. Civ. Proc. Code § 338(c) . . .").

7           80. As laid out above, and to the extent that Sonos's acquisition or attempted acquisition  
8 of patents purportedly directed to "cloud queue technology" could be considered a conversion of  
9 Google's property (as Google alleges), Google was put on notice by Sonos that Sonos had acquired  
10 or attempted to acquire patents purportedly directed to "cloud queue technology" at least as early  
11 as early as September 2, 2016 and at least by July 12, 2018.

12           81. Google filed its original declaratory judgment action on September 28, 2020.  
13 Dkt. 1. In this action, Google claimed non-infringement of several Sonos patents. In this action,  
14 Google did not mention Google's purported "cloud queue technology" and did not raise any claim  
15 for conversion or any factual allegations that would allegedly support a conversion claim.

16           82. Google's Second Amended Complaint was the first time that Google claimed that  
17 Sonos converted Google's property as a result of Sonos's alleged acquisition or attempted  
18 acquisition of patents purportedly directed to "cloud queue technology." SAC at ¶¶ 95-96.

19           83. Google provided a draft of this Second Amended Complaint, for the first time, to  
20 Sonos on November 4, 2021.

21           84. Google moved the Court for leave to file the Second Amended Complaint on  
22 November 16, 2021.

23           85. The Court granted in-part Google's motion for leave to file the Second Amended  
24 Complaint on January 21, 2022.

25           86. Google filed a revised Second Amended Complaint on February 4, 2022.

26           87. The Tenth Count (Conversion) set out in Google's Second Amended Complaint and  
27 the factual allegations provided in support thereof are not part of the conduct, transaction, or  
28 occurrence set out, or attempted to be set out, in Google's original complaint.

1           88. As such, Google's Tenth Count (Conversion) does not relate back to the date of  
2 Google's original complaint and should be considered as if filed on the day that the Second  
3 Amended Complaint was filed – February 4, 2022.

4           89. Under Google's interpretation of what constitutes conversion, Google's claim for  
5 conversion ripened at least as early as September 2, 2016.

6           90. Alternatively, and assuming Google's claim for conversion did not ripen at least as  
7 early as September 2, 2016, under Google's interpretation of what constitutes conversion, Google's  
8 claim for conversion ripened at least by October 13, 2016, at least by October 26, 2016, at least by  
9 January 31, 2018, or at least by July 12, 2018.

10           91. Because Google did not bring its action for conversion prior to September 2, 2019,  
11 prior to October 13, 2019, prior to October 26, 2019, prior to January 31, 2021, or even prior to  
12 July 12, 2021, the statute of limitations bars Google's relief.

13           92. Even assuming that Google's Tenth Count (Conversion) relates back to the date of  
14 Google's original complaint and can be considered as if filed on the day of that original complaint  
15 – September 28, 2020, Google's relief is still barred under the statute of limitations because under  
16 Google's interpretation of what constitutes conversion, Google's claim for conversion ripened at  
17 least as early as September 2, 2016, October 13, 2016, or by October 26, 2016, and Google failed  
18 to bring its action for breach of contract prior to September 2, 2019, prior to October 13, 2019, or  
19 even prior to October 26, 2019.

20                   **TENTH DEFENSE: RIGHT TO POSSESSION (CONVERSION)**

21           93. Sonos reasserts and incorporates its paragraphs 1 through 92 above.

22           94. Google's relief is precluded at least on grounds that Sonos had a right to possession  
23 of the '033 Patent application and the subject matter described and claimed therein at the time of  
24 the alleged conversion.

25           95. For one or more of the reasons set forth above, neither the Content Integration  
26 Agreement nor the collaboration established that Google had a right to possession of patents  
27 purportedly directed to "cloud queue technology."  
28

1           96.     The '033 Patent application is entitled to a priority date of December 30, 2011. The  
2 subject matter described in the specification of the '033 Patent was invented at least as early as  
3 December 30, 2011. Sonos was therefore entitled to claim subject matter contained within this  
4 December 30, 2011 filing in accordance with 35 U.S.C. § 120, including at the time of the alleged  
5 conversion.

6           97.     Google did not invent the “cloud queue idea” and was not the first to conceive of  
7 the “cloud queue idea” or the concept of a queue of one or more media items being stored in a  
8 cloud-based location or being provided by a cloud-based service. SAC at ¶¶ 25, 95-96.

9           98.     The earliest date that Google has pointed to as evidence that it invented the “cloud  
10 queue idea” or that it had communicated this “cloud queue idea” to Sonos was 2013. *Id.*

11           99.     But by this time, Sonos had already conceived of the concept of a queue of one or  
12 more media items being stored in a cloud-based location or being provided by a cloud-based  
13 service.

14           100.    For instance, at least as early as December 30, 2011, Sonos had conceived of the  
15 idea of a “remote playback queue provided by a cloud-based computing system,” as demonstrated  
16 by the '033 Patent filing.

17           101.    Moreover, Sonos had disclosed the concept of a “cloud queue” in several other  
18 earlier patent filings. For instance, Sonos’s U.S. Pat. No. 9,232,277 (“the '277 Patent”), filed on  
19 July 17, 2013 (four months prior to the Content Integration Agreement), expressly references this  
20 “cloud queue” concept. *See, e.g.*, Ex. BQ ('277 Patent) at col. 15, ll. 47-50 (“In other embodiments,  
21 playback **queues**, including the first playback **queue**, are stored **remotely** relative to the playback  
22 device. For example, the first playback queue may be stored in a **cloud-based** network or on a  
23 second playback device for access by the playback device.”) (emphasis added).

24           102.    As another example, Sonos’s U.S. Pat. No. 9,674,587 (“the '587 Patent”), filed on  
25 June 26, 2012 (17 months prior to the Content Integration Agreement), expressly references this  
26 concept as well. *See, e.g.*, Ex. BR ('587 Patent) at col. 14, ll. 36-41 (“a playback **queue** may be  
27 stored **remotely** over the Internet in memory on a ‘**cloud** server’ or network storage device. For  
28



1 example, the SONOS™ server 720 in FIG.7 may be used to store one or more playback queues for  
 2 SONOS™ systems 760 and 770.”).

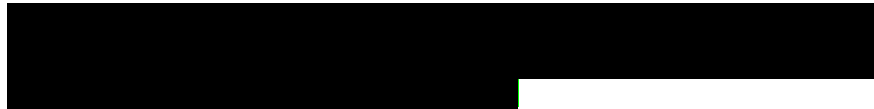
3 **ELEVENTH DEFENSE: CONSENT (CONVERSION)**

4 103. Sonos reasserts and incorporates its paragraphs 1 through 102 above.

5 104. Google’s relief is precluded at least on grounds that Google consented to Sonos’s  
 6 purported possession of patents directed to “cloud queue technology.”

7 105. As laid out above, on several occasions, beginning in 2016 and extending through  
 8 2019, Sonos informed Google that Sonos had acquired patents purportedly directed to “cloud queue  
 9 technology.” Indeed, Sonos had even alleged that Google infringed these patents and has provided  
 10 claim charts detailing Google’s infringement of these patents. At no point prior to Google’s Second  
 11 Amended Complaint in late 2021 did Google object to Sonos’s possession of these patents.

12 106. Moreover, as explained above, on December 12, 2018, Google executed the Service  
 13 Integration Agreement. Section 5.3 of the Service Integration Agreement states in part:

14 

15  
 16 Ex. BP at 6.

17 107. At least as of December 12, 2018, Sonos had been putting Google on notice for  
 18 years that Sonos had acquired patents purportedly directed to “cloud queue technology” and that  
 19 Google infringed these patents. Google’s acknowledgement in the Service Integration Agreement  
 20 that “certain features of either Parties’ Materials, the Service Provider App and the Sonos System  
 21 may be protected by patent law,” was express recognition and acknowledgement that the  
 22 technology and aspects of Sonos’s system that were disclosed and claimed in the patents that had  
 23 been shown to Google by this date were rightfully owned by Sonos.

24 108. By failing to raise a claim of conversion or otherwise object to Sonos’s ownership  
 25 of patents directed to “cloud queue technology,” Google consented to such ownership and  
 26 possession.

27 **TWELFTH DEFENSE: UNCLEAN HANDS (CONVERSION)**

28 109. Sonos reasserts and incorporates its paragraphs 1 through 108 above.



110. Google's relief under its conversion claim is precluded at least on grounds that Google engaged in unconscionable, bad faith, and inequitable conduct at least by the time of the alleged conversion.

111. For at least the same reasons discussed above in connection with Sonos's Unclean Hands defense to Google's breach claim, Google's relief under its conversion claim is barred.

**THIRTEENTH DEFENSE: WAIVER (CONVERSION)**

112. Sonos reasserts and incorporates its paragraphs 1 through 111 above.

113. Google's relief under its conversion claim is precluded at least on grounds that Google waived any right to relief.

114. For at least the same reasons discussed above in connection with Sonos's Waiver defense to Google's breach claim, Google's relief under its conversion claim is barred.

**REQUEST FOR RELIEF**

Sonos respectfully requests that the Court enter judgment in its favor and against Google as follows:

1. Dismissing, with prejudice, Google's claims against Sonos;
2. Denying all relief that Google seeks;
3. Finding this case to be exceptional under 35 U.S.C. § 285 and awarding Sonos its costs and attorney fees; and
4. Awarding any other relief the Court deems just and equitable.

**COUNTERCLAIMS**

In accordance with Rule 13 of the Federal Rules of Civil Procedure, Sonos hereby alleges and asserts the following Counterclaims against Google.

**INTRODUCTION**

1. Sonos is an American success story. It was founded in 2002 in Santa Barbara, California by a handful of engineers and entrepreneurs with a vision to invent the world's first wireless, whole-home audio system. At the time, popular audio systems were dependent on a centralized receiver hard-wired to each individual passive speaker throughout a home. Further, most homes with Internet access had dial-up connections, the iPhone was still five years away, and

1 there were no streaming music services. The technological barriers confronting Sonos were  
2 enormous.

3       2. To deliver on its vision, the Sonos team completely reimagined the in-home music  
4 system as a decentralized network of smart playback devices, and it developed a platform that could  
5 seamlessly and wirelessly distribute audio room by room or throughout the home at the user's  
6 discretion. Sonos created a "choose what to play, where to play it, and how loud" wireless audio  
7 system that could not only perform without lag (*e.g.* buffering, or network interruptions), but that  
8 was also so simple and intuitive that customers would make it part of their daily lives.

9       3. Commercial success did not come easy for Sonos as its vision was in many ways  
10 ahead of its time. But year by year, consumers – and the entire industry – came to appreciate that  
11 wireless multi-room audio devices and systems could not only work, but could become an essential  
12 part of the listening experience. Success required staying true to Sonos's disruptive vision,  
13 continuing to innovate while adjacent industries caught up and customers became more and more  
14 enamored with the idea of Sonos as they had the chance to encounter and use its products. Once  
15 Sonos had taken all the risks and placed enormous bets on research and development, the "first  
16 followers" began to copy Sonos's innovations.

17       4. To this day, Sonos remains focused on innovations that further enhance the listening  
18 experience. Sonos invests heavily in research and development and, as a result, frequently invents  
19 new systems with new technologies, enhanced functionality, improved sound quality, and an  
20 enriched user experience.

21       5. As a result, Sonos has become one of the world's leading providers of innovative  
22 audio products. In recognition of its wide-ranging innovations, the U.S. Patent & Trademark Office  
23 has granted or allowed Sonos more than 940 U.S. patents, including the patents-in-suit, with  
24 hundreds more patents in other countries. The innovations captured by these patents cover many  
25 important aspects of wireless multi-room audio devices/systems, including, for example, how to  
26 manage and control groups of playback devices, how to facilitate seamless control and transfer of  
27 audio playback among devices, and how to output amazing sound quality.

28

6. The industry has recognized the importance of Sonos's patents. For example, Sonos earned a spot on the IPO list of "Top 300 Organizations Granted U.S. Patents" and the IEEE recognized Sonos as having one of "[t]he technology world's most valuable patent portfolios." *See* Exs. E and F.

7. Sonos launched its first commercial products in 2005 and has since released a wide variety of critically acclaimed, patented, wireless multi-room audio products, including, for example, the Play:1, Play:3, Play:5 (Gen 1 and Gen 2), One (Gen 1 and Gen 2), One SL, Move, Playbar, Playbase, Beam, Sub, Connect, Port, Connect:Amp, Amp, Five, and Arc. *See, e.g.,* Ex. G. Sonos's products can be set up and controlled by the Sonos app. *Id.*

8. Sonos's efforts have made it incredibly popular with its customers. Sonos estimates that in fiscal year 2019 Sonos's customers listened to 7.7 billion hours of audio content using its products. And, as of September, 2019, almost two thirds of Sonos households had purchased and installed more than one Sonos product.

9. Sonos's record of innovation has made it the undisputed leader in what has come to be called the "multiroom audio" field. *See, e.g.,* Ex. H (2018 Digital Trends: "Sonos is the king of multiroom audio...."); Ex. I (2019 What Hi-Fi: "[N]o multi-room offering is as complete or as pleasurable to live with as Sonos.").

10. Sonos has already sued Google for infringing patents on its first group of inventions involving the set-up, control, playback, and synchronization of wireless playback devices. This case involves a second group of inventions which, as described more extensively below, tackle the novel technological challenges of how to stream music from a cloud-based service, how to create, manage, and invoke "zone scenes" to configure how multiple playback devices work together, and how to dynamically adjust the equalization of a playback device based on the environment in which the playback device is operating.

### **GOOGLE BEGINS INFRINGING**

11. Almost a decade after Sonos created the smart-speaker market, Google entered the space. Initially, Google sought to work with Sonos and, through those efforts, gained access to

1 Sonos's engineers, products, and technology. All too quickly, however, Google shifted focus and  
 2 began to develop and sell products that copied Sonos's technology and infringed Sonos's patents.

3 12. Part of what makes Sonos so successful is that, through its application, Sonos is  
 4 compatible with many different third-party music streaming services. When Google publicly  
 5 launched its own streaming music service – Google Play Music – in late 2011, Sonos worked with  
 6 Google to integrate the Google Play Music service into the Sonos ecosystem. As a result, Google  
 7 Play Music launched on the Sonos platform in 2014. *See, e.g.,* Ex. J.

8 13. This should have benefited everyone: Sonos's customers gained access to another  
 9 streaming service and Google Play Music users gained access to Sonos's devices. But as the press  
 10 recognized at the time, Sonos's integration work with Google was especially “deep” and therefore  
 11 gave Google a wide aperture through which to view Sonos's proprietary technology. *Id.* (2014  
 12 Wired: “This is the first time this sort of deep integration has happened between a third party music  
 13 service and Sonos.”). The copying soon followed.

14 14. Just eighteen months later, in 2015, Google began willfully infringing Sonos's  
 15 patents. On information and belief, Google used the knowledge it had gleaned from Sonos to build  
 16 and launch its first wireless multi-room audio product – Chromecast Audio.

17 15. Google's Chromecast Audio began what has turned into Google's relentless effort  
 18 to copy Sonos and use Sonos's patented technology. For example, although Google's original  
 19 Chromecast Audio did not yet include Sonos's patented multi-room audio functionality, even when  
 20 it was launched Google was working to add that Sonos-patented feature. *See* Ex. K (2015 The  
 21 Guardian: “Google is also working on multi-room audio streaming using the Chromecast Audio,  
 22 but it will not support the popular feature out of the box.”). And, when Google added the infringing  
 23 feature, the press immediately noted how this “major feature update” made Google's product even  
 24 more “like the ones made by Sonos:”

25 Google's recently-launched Chromecast Audio adapter is getting a  
 26 major feature update this week: Consumers will now be able to group  
 27 multiple Chromecast audio adapters to stream their favorite music  
 28 simultaneously in more than one room, similar to the multi-room  
 support available for internet-connected loudspeakers like the ones  
 made by Sonos.

1 Ex. L (2015 *Variety* article entitled “Google’s Chromecast Audio Adapter Gets Multi-Room  
2 Support Similar to Sonos”); *see also* Ex. M (2015 Pocket-Lint) (“You control your Sonos  
3 experience with one app. Well, thanks to a new software rollout, Chromecast Audio can pretty  
4 much do the same thing.”).

5 16. This has become a consistent pattern. Time and again, Google has added features  
6 to its products that first appeared in Sonos’s products and which make use of Sonos’s patented  
7 technology.

8 **GOOGLE’S INFRINGEMENT ACCELERATES DESPITE CONTINUED NOTICE OF**  
9 **INFRINGEMENT**

10 17. Since 2015, Google’s misappropriation of Sonos’s patented technology has  
11 proliferated. Google has expanded its wireless multi-room audio system to more than a dozen  
12 infringing products, including the Google Home Mini, Google Home, Google Home Max, and  
13 Pixel phones, tablets, and laptops. And Google has persisted in infringing even though Sonos has  
14 warned Google of its infringement on at least four separate occasions dating back to 2016.

15 18. For example, in 2016 (a year after Google launched the Chromecast Audio wireless  
16 adapter), Google released the Google Home multi-room audio player (which was controlled by  
17 Google’s rebranded multi-room controller app – the Google Home app). Unlike the Chromecast  
18 Audio, the Google Home added an internal speaker driver making it an “all-in-one” audio player  
19 akin to Sonos’s prior Play:1, Play:3, and Play:5 products.

20 19. Sonos raised the issue of infringement as to these products with Google as early as  
21 August 2016. Sonos hoped that Google would respect Sonos’s intellectual property and the  
22 extensive work Sonos had put into inventing and developing its products. But Google did no such  
23 thing.

24 20. On September 2, 2016, Sonos sent John LaBarre and Allen Lo at Google a document  
25 identifying 24 issued Sonos patents and 4 allowed Sonos patent applications, including ones that  
26 share a common specification with the ’615 Patent, the ’966 Patent, ’033 Patent, and ’885 Patent.  
27 Ex. BY.

1           21.     On October 13, 2016, Sonos sent John LaBarre, Allen Lo, and Louis Sorell at  
2 Google a document identifying 22 issued Sonos patents and 6 allowed Sonos patent applications  
3 (including ones that share a common specification with the '615 Patent, the '966 Patent, '033  
4 Patent, and '885 Patent) and identifying relevant Google products for each. Ex. BZ.

5           22.     On October 26, 2016, Sonos sent John LaBarre at Google a PowerPoint presentation  
6 identifying 29 issued Sonos patents and 3 allowed Sonos patent applications (including ones that  
7 share a common specification with the '615 Patent, the '966 Patent, '033 Patent, and '885 Patent).  
8 Ex. CA.

9           23.     On January 31, 2018, Sonos sent Matthew Gubiotti at Google a PowerPoint  
10 presentation identifying 16 issued Sonos patents and 1 allowed Sonos patent application (including  
11 ones that share a common specification with the '966 Patent and '885 Patent), and identifying  
12 relevant Google products for each, including products accused in this case. Ex. CB.

13           24.     On July 12, 2018, Sonos sent John LaBarre and Matthew Gubiotti at Google a  
14 document identifying 58 issued Sonos patents (including ones that share a common specification  
15 with the '615 Patent, the '966 Patent, '033 Patent, and '885 Patent) and identifying relevant Google  
16 products for each, including products accused in this case. Ex. CC.

17           25.     On February 22, 2019, Sonos sent Matthew Gubiotti , Bradley Riel, and Tim  
18 Kowalski at Google a letter enclosing a link to an electronic repository containing 100 claim charts  
19 detailing Google's infringement of 92 issued Sonos patents and 8 allowed Sonos patent applications  
20 (including the '615 Patent and others that share a common specification with the '615 Patent, the  
21 '966 Patent, '033 Patent, and '885 Patent). Ex. CD.

22           26.     On June 13, 2019, Sonos sent Bradley Riel and Tim Kowalski at Google a  
23 PowerPoint presentation reiterating the 100 claim charts detailing Google's infringement of 92  
24 issued Sonos patents and 8 allowed Sonos patent applications sent on February 22, 2019 and  
25 identifying 6 issued Sonos patents (including one that shares a common specification with the '966  
26 Patent and '885 Patent) and identifying relevant Google products for each. Ex. CE.

27           27.     On January 6, 2020, Sonos sent Bradley Riel and Tim Kowalski at Google a pre-  
28 filing copy of an International Trade Commission Complaint, a U.S. District Court complaint, and

1 claim charts detailing Google's infringement of 5 issued Sonos patents via products that are also  
2 accused in this case.

3 28. On September 28, 2021 Sonos sent Bradley Riel and Tim Kowalski at Google a pre-  
4 filing copy of Sonos's complaint detailing Google's infringement of, inter alia, the '615, '033, and  
5 '966 Patents.

6 29. On January 8, 2021, Sonos's counsel sent Google's counsel a copy of an amended  
7 complaint and supplemental infringement contentions detailing Google's infringement of the '885  
8 Patent.

9 30. These instances establish that Google was, over a five-year period, put on repeated  
10 notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning specifically the  
11 products accused in this case. At a minimum, this knowledge and repeated and persistent disclosure  
12 establishes that Google was, for some time periods, at least willfully blind to the fact that the  
13 asserted patents existed and, for other time periods, had actual knowledge of the existence of the  
14 asserted patents. Further, this knowledge and repeated and persistent disclosure establishes that  
15 Google, for some time periods, had at least failed to investigate whether it infringed the asserted  
16 patents despite the existence of a high risk of infringement and, for other time periods, had actual  
17 knowledge of a credible and specific allegation of infringement of the asserted patents.

18 31. Despite this consistent and repeated notice, Google did not stop infringing. Instead,  
19 it doubled down and introduced new infringing products, making use of even more patented  
20 technology from Sonos.

21 32. For example, in 2017, eight years after Sonos introduced its first all-in-one audio  
22 player – the Play:5 – Google released its first all-in-one audio players – the Google Home Max and  
23 the Google Home Mini. Google's Home Max in particular was seen as a "Sonos Clone" and a  
24 "not-so-subtle copy of the [Sonos] Play:5 speaker..." Ex. N. As explained by Gizmodo, "[i]t's  
25 also hard not to see the [Google Home Max] device as something of a jab at Sonos." *Id.*; *see also*,  
26 *e.g.*, Ex. O (2017 Android Central: "You can't help but look at Google Home Max... and come to  
27 the conclusion that Google is sticking its nose where Sonos has been for years.").



1           33.     Then again, in February 2019, Sonos put Google on notice of infringement of 100  
2     Sonos patents, including asserted United States Patent No. 9,967,615.

3           34.     Nothing Sonos did, however, deterred Google from expanding its infringement.  
4     Google's infringing product line now includes at least the Chromecast, Chromecast Ultra,  
5     Chromecast Audio, Chromecast with Google TV, Home Mini, Nest Mini, Home, Home Max,  
6     Home Hub, Nest Hub, Nest Hub Max, Nest Audio, and Nest Wifi Point (individually or  
7     collectively, "Google Audio Player(s)"), all of which can be controlled by, for example, the  
8     YouTube Music app, the Google Play Music app, the YouTube app, and the Google Home app  
9     (individually or collectively, "Google App(s)"). *See, e.g.*, Exs. P-Z.

10          35.     In addition to providing the Google Apps for controlling the Google Audio Players,  
11     Google also offers various infringing hardware controllers that are pre-installed with the Google  
12     Play Music app, YouTube app, and/or YouTube Music app (and capable of downloading and  
13     executing the Google Apps that are not pre-installed). These infringing hardware controllers  
14     include, for example, Google's "Pixel" phones, tablets, and laptops (*e.g.*, the Pixel 3, Pixel 3 XL,  
15     Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, and Pixel 4a phones, the Pixel Slate tablet, and the  
16     Pixelbook and Pixelbook Go laptops) (individually or collectively, "Google Pixel Device(s)"). *See,*  
17     *e.g.*, Exs. AA-AE.

18          36.     Herein, "Google Wireless Audio System" refers to one or more Google Audio  
19     Players, one or more Google Pixel Devices, and/or one or more Google Apps.

20          37.     In order to hold Google accountable for its willful infringement of Sonos's patents,  
21     Sonos filed a complaint in January 2020 asking the United States International Trade Commission  
22     ("ITC") to institute an investigation into Google's unlawful importation into and sale in the United  
23     States of infringing products. The ITC instituted an investigation, *In re Certain Audio Players and*  
24     *Controllers, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-1191 to  
25     determine whether Google's audio players and controllers infringe five Sonos patents directed to  
26     fundamental features such as playing music on multiple speakers in synchrony, playing music in  
27     stereo over two or more players, a controller that can easily setup a player on a wireless network,  
28



1 and playback-control features such as controlling both the volume of individual speakers and a  
2 group of speakers.

3 38. While the ITC Investigation has been pending, Google has continued to increase its  
4 infringement. For example, press reports indicate that Google is introducing new products and  
5 changes that mean Google is “one step closer to replacing your Sonos system.” Ex. AF; *see also*  
6 Ex. AP (“The new functionality appears to be the most direct challenge to the likes of Sonos, which  
7 has enjoyed enormous success by creating a series of connected speakers and soundbars that can  
8 play music simultaneously – or individually.”). The press has similarly noted that Google’s new  
9 speaker “could be a new rival for the likes of the Sonos One, the best smart speaker you can buy in  
10 2020.” Ex. AG; *see also* Ex. AP (“Just like Sonos, you can also change the volume on each speaker  
11 individually from the main interface.”). And press reports indicate that Google has expanded its  
12 use of Sonos’s stereo pair technology into the new smart-speakers even though Google is currently  
13 being sued for infringing a Sonos patent on this technology. Exs. AH, AP.

14 39. Google itself has also highlighted the importance of its use of Sonos’s technology.  
15 For example, Google’s Chris Chan publicly stated that “[c]ontrolling the audio throughout my  
16 home, no matter who’s listening, has been incredibly helpful” and that “[t]oday, we’re expanding  
17 that control. You can already manually group Nest devices in order to play the same music on  
18 various speakers at the same time, and now we’re launching multi-room control so you can  
19 dynamically group multiple cast-enabled Nest devices (speakers, Smart Displays, Chromecasts) in  
20 real-time to fill multiple rooms with music.” Ex. AH; *see also* Ex. AP. Again, Google has  
21 expanded its use of this technology while it is being sued for infringing Sonos’s patents on this  
22 precise technology.

23 40. Google’s aggressive and deliberate expansion of its use of Sonos’s patented  
24 technology has led observers to conclude that “[n]o market is safe from [the] search engine  
25 monster” and that Google was specifically “offering new products to compete with Sonos in the  
26 music streaming market.” *See* Ex. AI.

**GOOGLE’S CONTINUED INFRINGEMENT FORCES THIS SUIT**

41. In the face of Google’s unrelenting infringement, Sonos has no choice but to bring this suit. In this action, Sonos asserts patents that are not at issue in the ITC or the related district court action. Sonos is also accusing Google’s Wireless Audio System of infringing different patented features than are at issue in either of those actions.

42. Sonos’s ITC suit addressed Google’s infringement of Sonos patents covering fundamental aspects of wireless, whole-home audio systems. While groundbreaking, those patents represent only some of Sonos’s ongoing innovation from its inception to today. Through its foresight, substantial investment, and relentless pursuit of excellence, Sonos built on its previous success and invented a number of key features consumer have grown to expect and demand in streaming music listening.

43. For example, as explained more fully below, Sonos’s U.S. Patent Nos. 9,967,615 and 10,779,033 (the “’615 Patent” and the “’033 Patent,” respectively) cover key aspects of Sonos’s inventive approach for streaming music from a cloud-based service to a media playback system, including technology for transferring playback responsibility for a cloud-based stream of media content from a user’s device, such as a smart phone, to a media playback system that is then configured to retrieve and play back the cloud-based media content.

44. Sonos was well ahead of the field when it began to develop these inventions in 2011. At that time, Sonos’s audio system, including its smart-phone app controller, was in a category all its own. Moreover, streaming content from cloud-based media services for playback by computers – let alone other types of networked devices like smart phones and smart speakers – was in its infancy. Nonetheless, at a time years before Google released its first Chromecast product, Sonos envisioned a novel experience of continuous and intuitive control of a user’s entire streaming listening experience, across multiple networked devices, including smart phones and/or smart speakers. That vision gave rise to the innovation of technology for enabling seamless transition of playback responsibility for cloud-based media content between different networked devices, such as a smart phone and a smart speaker. This paradigm is now fundamental across the entire

1 streaming industry as user expectations of continuous listening experiences have continued to  
2 converge with Sonos's vision.

3 45. Similarly, Sonos's U.S. Patent Nos. 9,344,206, 10,469,966, and 10,848,885 (the  
4 "'206 Patent," the "'966 Patent," and "the '885 Patent," respectively) cover some of Sonos's  
5 inventions related to creating, managing, and invoking "zone scenes" to configure how multiple  
6 players work together. With these patents, Sonos once again anticipated what consumers would  
7 want and invented a new feature for its system. Using the inventions of the '206, '966, and '885  
8 Patents, playback devices can be grouped together for synchronous playback in an easy and  
9 intuitive manner using "zone scenes." Advantageously, such a "zone scene" can be accessed and  
10 invoked by multiple devices and in various ways (*e.g.*, by voice) even when the particular controller  
11 that created the "zone scene" is not on the network.

12 46. Sonos provided a pre-filing copy of both the original complaint and this Amended  
13 Complaint to Google, thereby providing clear pre-suit notice of infringement of the patents-in-suit.  
14 Google, however, has never given any indication that it is willing to stop infringing, and did not do  
15 so in response to receiving a draft of either the original complaint or this Amended Complaint.

16 47. On information and belief, Google is unwilling to stop infringing because its  
17 infringement of Sonos's patented inventions has paved the way for Google to generate billions of  
18 dollars in revenue. A December 2018 market report by Royal Bank of Canada ("RBC"), for  
19 example, concluded that Google sold over 40 million Google Home devices in the U.S. and that  
20 Google generated \$3.4 billion in Google Home revenue in 2018 alone. *Ex. AJ* at pp. 1, 4, 14-15.  
21 RBC also found that, as of August 2017, Google had sold more than 55 million Chromecast devices  
22 and that Google generated almost \$1 billion in Chromecast revenue in 2018. *Id.* at 4,16, 18.  
23 Further, RBC estimated that, in 2018, Google generated \$3.4 billion in Pixel device revenue. *Id.*  
24 at 4, 8.

25 48. By 2021, RBC estimates that Google will be annually selling over 100 million  
26 Google Home devices in the U.S. and generating over \$8 billion in Google Home revenue. *Id.* at  
27 4, 14-15. In addition, by 2021, RBC estimates that Google will annually generate \$2.4 billion in  
28 Chromecast revenue and nearly \$7 billion in Pixel device revenue. *Id.* at 4, 8, 18.

1           49.     The revenue obtained from the sale of Google’s hardware devices vastly understates  
2 the value to Google of infringing Sonos’s patents. On information and belief, Google is  
3 intentionally selling the infringing products at a discount and/or as a “loss leader” with the  
4 expectation that this will allow Google to generate even more revenue in the future – *e.g.*, by  
5 powering Google’s continued dominance of the market for search advertising. In particular,  
6 Google’s infringement of Sonos’s patented inventions has helped and/or will help Google generate  
7 significant revenue from the use of Google’s hardware devices including advertising, data  
8 collection, and search via the Google Wireless Audio Systems. As the *New York Post* explained,  
9 “Amazon and Google both discounted their home speakers so deeply over the holidays that they  
10 likely lost a few dollars per unit ... hoping to lock in customers and profit from later sales of goods  
11 and data about buying habits.” Ex. AK. Similarly, *News Without Borders* explained that  
12 companies like Google are using their “smart speaker” devices as “‘loss leader[s]’ to support  
13 advertising or e-commerce.” Ex. AL.

14           50.     On information and belief, Google’s copying of Sonos’s patented inventions has  
15 also helped and/or will help Google generate significant revenue from driving its users to make  
16 purchases such as streaming music subscriptions and retail purchases via the Google Wireless  
17 Audio Systems. For example, an NPR “smart speaker” survey found that 28% of survey  
18 respondents agreed that “[g]etting [a] Smart Speaker led [them] to pay for a music service  
19 subscription,” and Google offers two such subscriptions – Google Play Music and YouTube Music.  
20 Ex. AM at p. 20. Likewise, the NPR survey also found that 26% of respondents use their smart  
21 speakers “regularly” to “add [items] to shopping list.” *Id.* at 14; *see also, e.g.*, Ex. AL (stating that  
22 companies like Google are using their “smart speaker” devices as “‘loss leader[s]’ to support... e-  
23 commerce.”).

24           51.     On information and belief, Google is willfully infringing Sonos’s patents as part of  
25 Google’s calculated strategy to vacuum up invaluable consumer data from users and, thus, further  
26 entrench the Google platform among its users and fuel its dominant advertising and search  
27 platforms.  
28

52. Google’s infringement – and its strategy to sell its infringing products at a loss to develop alternative revenue streams – has caused significant damage to Sonos. For example, the Google Home Mini predatorily implemented Sonos’s valuable patented technology into an all-in-one wireless multi-room product that Google sells at a highly subsidized price point or even gives away for free. Ex. AN (“At \$49, Google Home Mini works on its own or you can have a few around the house, giving you the power of Google anywhere in your home.”); Ex. AL (“Google partnered with Spotify to offer Home Minis as a free promotion for Spotify Premium customers. Spotify’s premium userbase is nearly 90 million, so if even a fraction of users take the free offer, a massive influx of Google smart speakers will enter the market.”).

### **THE PARTIES**

53. Sonos, Inc. is a Delaware corporation with its principal place of business at 614 Chapala Street, Santa Barbara, California 93101. Sonos is the owner of the patents-in-suit. Sonos holds all substantial rights, title and interest in and to the Asserted Patents.

54. Google LLC is a Delaware limited liability corporation with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043.

55. Google LLC is one of the largest technology companies in the world and conducts product development, engineering, sales, and online retail, search, and advertising operations in this District.

56. Google LLC directly and/or indirectly develops, designs, manufactures, distributes, markets, offers to sell, sells, and/or imports the infringing Google Wireless Audio System at issue in this litigation in/into the United States, including in this judicial district, and otherwise purposefully directs infringing activities to this District in connection with its Google Wireless Audio System.

### **JURISDICTION AND VENUE**

57. This counterclaim for patent infringement arises under the Patent Laws of the United States, 35 U.S.C. § 1 et. seq. This Court has original jurisdiction under 28 U.S.C. §§ 1331 and 1338.

58. This Court has personal jurisdiction over Google because, pursuant to Fed. R. Civ. P. 11(b)(3), Google has: (1) availed itself of the rights and benefits of the laws of the State of California, (2) transacted, conducted, and/or solicited business and engaged in a persistent course of conduct in the State of California (and in this District), (3) derived substantial revenue from the sales and/or use of products, such as the infringing Google Wireless Audio System, in the State of California (and in this District), (4) purposefully directed activities (directly and/or through intermediaries), such as shipping, distributing, offering for sale, selling, and/or advertising its infringing Google Wireless Audio System, at residents of the State of California (and residents in this District), (5) delivered its infringing Google Wireless Audio System into the stream of commerce with the expectation that the Google Wireless Audio System will be used and/or purchased by consumers, and (6) committed acts of patent infringement in the State of California (and in this District).

59. This Court also has personal jurisdiction over Google because it is registered to do business in the State of California and has one or more regular and established places of business in this judicial district.

60. Venue is proper in this District under the provisions of 28 U.S.C. § 1400(b) because, as noted above, Google has committed acts of infringement in this district and has one or more regular and established places of business in this district.

### **THE PATENTS-IN-SUIT**

#### **U.S. Patent No. 9,967,615**

61. Sonos is the owner of U.S. Patent No. 9,967,615 (the “’615 Patent”), entitled “Networked Music Playback,” which was duly and legally issued by the United States Patent and Trademark Office (“USPTO”) on May 8, 2018. A copy of the ’615 Patent, is attached hereto as Exhibit A.

62. The ’615 Patent relates generally to technology for facilitating transfer of playback responsibility from a user’s device to a media playback system.

63. The '615 Patent recognized that “[t]echnological advancements have increased the accessibility of music content, as well as other types of media...” ’615 Patent at 1:19-20. This allowed users to access audio and video content over the Internet. *Id.* at 1:21-26.

64. But, the '615 Patent identified a particular problem and provided an unconventional technological solution. Specifically, the patent recognized that “[w]ired or wireless networks can be used to connect one or more multimedia playback devices for a home or other location playback network (*e.g.*, a home music system).” ’615 Patent at 1:66-2:2. This means that “[m]usic and/or other multimedia content can be shared among devices and/or groups of devices (also referred to herein as zones) associated with a playback network.” *Id.* at 2:6-9. The '615 Patent is directed to a method, tangible media, and controller that “facilitate streaming or otherwise providing music from a music-playing application (*e.g.*, browser-based application, native music player, other multimedia application, and so on) to a multimedia content playback (*e.g.*, Sonos<sup>TM</sup>) system.” *Id.* at 2:10-14.

65. The '615 Patent provides an unconventional technological solution to this problem. For example, the '615 Patent describes an “Example Controller” that “can be used to facilitate the control of multi-media applications...” ’615 Patent at 9:8-14. “In particular, the controller 500 is configured to facilitate a selection of a plurality of audio sources available on the network and enable control of one or more zone players ... through a wireless network interface 508.” *Id.* at 9:14-18. Further, the '615 Patent describes embodiments that “enable a user to stream music from a music-playing application (*e.g.*, browser-based application, native music player, other multimedia application and so on) to a local multimedia content playback (*e.g.*, Sonos<sup>TM</sup>) system.” ’615 Patent at 12:8-12. More specifically, the '615 Patent teaches that while “a user listens to a third party music application (*e.g.*, Pandora<sup>TM</sup> Rhapsody<sup>TM</sup>, Spotify<sup>TM</sup>, and so on)” on a user device, such as the user’s “smart phone,” the user can “select[] an option to continue playing [the current] channel on her household music playback system (*e.g.*, Sonos<sup>TM</sup>),” which will cause the user’s “playback system” to “pick[] up from the same spot on the selected channel that was on her phone and output[] that content (*e.g.*, that song) on speakers and/or other playback devices connected to the household playback system.” *Id.* at 12:44-53; *see also id.* at 13:1-53.



66. The '615 Patent goes on to teach specific technology for facilitating this transfer of playback responsibility from the user's device to the user's playback system. For instance, the '615 Patent teaches that one aspect of this technology involves causing data for retrieving network-based media content (such as a uniform resource locator (URI)) to be passed to a playback device in the playback system so that the playback device can "run on its own to fetch the content" from a networked audio source, such as a "cloud" server that is accessible over the Internet. *Id.* at 12:53-63; *see also id.* at 12:63-67 (describing that "[a] third party application can open or utilize an application programming interface (API) to pass music to the household playback system without tight coupling to that household playback system"); 15:47-16:19 (describing a "throw it over the wall" approach in which "a third party application provides a multimedia playback device (*e.g.*, a Sonos™ zone player (ZP)) with enough information about content (*e.g.*, an audio track) so that . . . the local playback system (*e.g.*, SonosNet™) can directly access a source of the content and . . . play the content directly off the network (*e.g.*, the Internet) or cloud," where the "connection between the third-party application and the local playback device (*e.g.*, Sonos ZonePlayer™) can be direct over a local area network (LAN)" or "remote through a proxy server in the cloud"); 16:53-17:4 (describing various embodiments for "queue management" associated with the transfer of playback from a control device to a playback system, including an embodiment where a "shared queue is provided between the local playback system and the third party application to keep the local system and the application synchronized"). Further, the '615 Patent teaches that another aspect of this technology involves transitioning the user's device into a mode in which it functions to control the playback of the media content by the user's playback system after the transfer. *Id.* at 16:20-42, 17:5-20. In this way, the technology taught by the '615 Patent provides for intuitive and seamless transfer of playback responsibility from a user's device to a media playback system.

67. In line with these teachings, the '615 Patent claims devices, computer-readable media, and methods for facilitating transfer of playback responsibility from a user's device to a media playback system.

68. For example, claim 13 of the '615 Patent recites a non-transitory computer readable storage medium including instructions for execution by a processor that, when executed, cause a



control device to perform various functions that facilitate transfer of playback responsibility from the device to a media playback system. *See* '615 Patent, claim 13. When the instructions are executed, the control device is initially operable to (i) cause a graphical interface to display a control interface including one or more transport controls to control playback by the control device, (ii) identify playback devices connected to a local area network, (iii) cause the graphical interface to display a selectable option for transferring playback from the control device, and (iv) detect a set of inputs to transfer playback from the control device to a particular playback device. *Id.* Additionally, the instructions configure the control device so that, after detecting the set of inputs to transfer playback from the control device to the particular playback device, the control device is operable to cause playback to be transferred from the control device to the particular playback device by (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service, (b) causing playback at the control device to be stopped, and (c) modifying the one or more transport controls of the control interface to control playback by the playback device. *Id.* Additionally yet, the instructions configure the control device so that the control device is operable to cause the particular playback device to play back the multimedia content, which involves the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content. *Id.*

**U.S. Patent No. 10,779,033**

69. Sonos is the owner of U.S. Patent No. 10,779,033 (the “’033 Patent”), entitled “Systems And Methods For Networked Music Playback,” which was duly and legally issued by the United States Patent and Trademark Office (“USPTO”) on September 15, 2020. A copy of the ’966 Patent, is attached hereto as Exhibit B.

70. The ’033 Patent is related to the ’615 Patent in that they are both continuations of application No. 13/341,237, filed on December 30, 2011, now U.S. Patent No. 9,654,821. Thus,

1 the '033 and '615 Patents share essentially the same specification. Sonos incorporates by reference  
2 and re-alleges paragraphs 52-58 of this Amended Complaint as if fully set forth herein.

3 71. Like the '615 Patent, the '033 Patent claims devices, computer-readable media, and  
4 methods for facilitating transfer of playback responsibility from a user's device to a media playback  
5 system, which provide an unconventional solution to the technological problem described in the  
6 '615 Patent.

7 72. For example, claim 1 of the '033 Patent recites a computing device with specific  
8 hardware configurations, including a non-transitory computer-readable medium that stores  
9 program instruction that can be executed by the device's processor(s). *See* '033 Patent, claim 1.  
10 When the instructions are executed, the computing device can initially operate in a first mode in  
11 which it is configured for playback of a remote playback queue provided by a cloud-based  
12 computing system associated with a cloud-based media service. *Id.* In that mode, the computing  
13 device is operable to (i) display a representation of one or more playback devices in a media  
14 playback system that are communicatively coupled to the computing device over a data network  
15 and available to accept playback responsibility for the remote playback queue, and (ii) while  
16 displaying the representation of the one or more playback devices, receive user input indicating a  
17 selection of at least one given playback device from the one or more playback devices. *Id.*  
18 Additionally, the instructions configure the computing device so that, based on receiving the user  
19 input, the computing device is operable to transmit an instruction for the at least one given playback  
20 device to take over responsibility for playback of the remote playback queue from the computing  
21 device, wherein the instruction configures the at least one given playback device to (i) communicate  
22 with the cloud-based computing system in order to obtain data identifying a next one or more media  
23 items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media  
24 item in the remote playback queue from the cloud-based media service; and (iii) play back the  
25 retrieved at least one media item. *Id.* Additionally yet, the instructions configure the computing  
26 device so that the computing device is operable to detect an indication that playback responsibility  
27 for the remote playback queue has been successfully transferred from the computing device to the  
28 at least one given playback device, and then after detecting the indication, transition from (a) the

1 first mode in which the computing device is configured for playback of the remote playback queue  
 2 to (b) a second mode in which the computing device is configured to control the at least one given  
 3 playback device's playback of the remote playback queue and the computing device is no longer  
 4 configured for playback of the remote playback queue. *Id.*

5 **U.S. Patent No. 10,469,966**

6 73. Sonos is the owner of U.S. Patent No. 10,469,966 (the "'966 Patent"), entitled "Zone  
 7 Scene Management," which was duly and legally issued by the United States Patent and Trademark  
 8 Office ("USPTO") on November 5, 2019. A copy of the '966 Patent, is attached hereto as  
 9 Exhibit C.

10 74. The '966 Patent is related to the '206 Patent in that they are both continuations of  
 11 application No. 13/896,829, filed on May 17, 2013, now U.S. Patent No. 8,843,228. Thus, the '966  
 12 and '206 Patents share essentially the same specification. Sonos incorporates by reference and re-  
 13 alleges paragraphs 64-69 of this Amended Complaint as if fully set forth herein.

14 75. The '906 Patent claims devices, computer-readable media, and methods for  
 15 managing and using "zone scenes" to facilitate grouping of zone players, which provides an  
 16 unconventional solution to the technological problems related to grouping zone players that are  
 17 described in the '906 Patent.

18 76. For example, claim 1 of the '966 Patent describes a computing device with a  
 19 processor that can execute instructions stored in the computing device's non-transitory, computer  
 20 readable medium. Those instructions, when executed, cause the computing device to be operable  
 21 to (i) receive a first request to create a first zone scene comprising a first predetermined grouping  
 22 of zone players that are to be configured for synchronous playback when the first zone scene is  
 23 invoked, and (ii) based on the first request, cause creation of the first zone scene, cause an indication  
 24 of the first zone scene to be transmitted to a first zone player in the first zone scene, and cause  
 25 storage of the first zone scene. *See, e.g.,* '966 Patent, claim 1. Additionally, the instructions, when  
 26 executed, cause the computing device to be operable to (i) receive a second request to create a  
 27 second zone scene comprising the first zone player and at least one other zone player that is not in  
 28 the first zone scene, and (ii) based on the second request, cause creation of the second zone scene,

1 cause an indication of the second zone scene to be transmitted to the first zone player, and cause  
 2 storage of the second zone scene. *Id.* Additionally yet, the instructions, when executed, cause the  
 3 computing device to be operable to (i) display representations of the first and second zone scenes,  
 4 (ii) while displaying the representations, receive a third request to invoke the first zone scene, and  
 5 (iii) based on the third request, cause the first zone player to transition from operating in a  
 6 standalone mode to operating in accordance with the first predefined grouping of zone players so  
 7 that the first zone player is configured to coordinate with at least the second zone player to output  
 8 media in synchrony with output of media by at least the second zone player. *Id.*

9 **U.S. Patent No. 10,848,885**

10 77. Sonos is the owner of U.S. Patent No. 10,848,885 (the “’885 Patent”), entitled “Zone  
 11 Scene Management,” which was duly and legally issued by the United States Patent and Trademark  
 12 Office (“USPTO”) on November 24, 2020. A copy of the ’885 Patent, is attached hereto as  
 13 Exhibit D.

14 78. The ’885 Patent is related to the ’206 and ’966 Patents in that they are all  
 15 continuations of application No. 13/896,829, filed on May 17, 2013, now U.S. Patent  
 16 No. 8,843,228. Thus, the ’885, ’966 and ’206 Patents share essentially the same specification.  
 17 Sonos incorporates by reference and re-alleges paragraphs 64-73 of this Amended Complaint as if  
 18 fully set forth herein.

19 79. The ’885 Patent claims devices, computer-readable media, and methods for  
 20 managing and operating in accordance with different “zone scenes,” which provides an  
 21 unconventional solution to the technological problems related to grouping zone players that are  
 22 described in the ’885 Patent.

23 80. For example, claim 1 of the ’885 Patent describes a first zone player with one or  
 24 more processors that can execute instructions stored in the first zone player’s non-transitory,  
 25 computer-readable medium. Those instructions, when executed, cause the first zone player to be  
 26 operable to, while operating in a standalone mode, (i) receive a first indication that the first zone  
 27 player has been added to a first zone scene comprising a first predetermined grouping of zone  
 28 players that are to be configured for synchronous playback when the first zone scene is invoked,

1 and (ii) receive a second indication that the first zone player has been added to a second zone scene  
2 comprising the first zone player and at least one other zone player that is not in the first zone scene  
3 that are to be configured for synchronous playback when the second zone scene is invoked. *Id.*  
4 Additionally, the instructions, when executed, cause the first zone player to continue to operate in  
5 a standalone mode until one of the first and second zone scenes has been selected for invocation.  
6 *Id.* Additionally yet, the instructions, when executed, cause the first zone player to be operable to,  
7 (i) after one of the first or second zone scenes has been selected for invocation, receive an  
8 instruction to operate in accordance with the given first or second zone scene comprising a  
9 predefined grouping of zone player and (ii) based on the instruction, transition from operating in a  
10 standalone mode to operating in accordance with the predefined grouping of zone players so that  
11 the first zone player is configured to output media in synchrony with output of media by at least  
12 one other zone player in the predefined grouping. *Id.*

13 **COUNTERCLAIM I: INFRINGEMENT OF U.S. PATENT NO. 9,967,615**

14 81. Sonos incorporates by reference and re-alleges paragraphs 1-80 of this Amended  
15 Complaint as if fully set forth herein.

16 82. Google and/or users of the Google Wireless Audio System have directly infringed  
17 (either literally or under the doctrine of equivalents) and continue to directly infringe one or more  
18 of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for  
19 sale, and/or selling the Google Wireless Audio System within the United States and/or importing  
20 the Google Wireless Audio System into the United States without authority or license.

21 83. In the course of this litigation, Sonos has served Google with infringement  
22 contentions detailing Google's infringement of the '615 Patent. *See* Ex. CH; Ex. CI.

23 84. In addition to providing Google with a claim chart detailing Google's infringement  
24 of the '615 Patent on February 22, 2019, on September 28, 2020, Sonos provided Google with a  
25 draft of the original complaint prior to its filing. That draft identified the '615 Patent and described  
26 how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that  
27 Google infringed claims of the '615 Patent prior to Sonos filing this action.  
28

1           85.     Additionally and/or alternatively, Google has indirectly infringed and continues to  
2 indirectly infringe one or more of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(b),  
3 by actively inducing users of the Google Wireless Audio System to directly infringe the one or  
4 more claims of the '615 Patent. In particular, (a) Google had actual knowledge of the '615 Patent  
5 or was willfully blind to its existence prior to, and no later than, February 2019 and had actual  
6 knowledge or was willfully blind to Sonos's infringement allegations at least as early as  
7 September 28, 2020 when Sonos provided Google a copy of the complaint (*see* ¶¶ 19-29, above),  
8 (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System  
9 to directly infringe one or more claims of the '615 Patent by promoting, advertising, and instructing  
10 customers and potential customers about the Google Wireless Audio System (including uses  
11 thereof) and encouraging such customers and potential customers to engage in activity that  
12 constitutes direct infringement (*see* Exs. U-Z; *see also* citations above in the exemplary  
13 infringement claim chart for claim 13 of the '615 Patent), (c) Google knows (or should know) that  
14 its actions will induce users of the Google Wireless Audio System to directly infringe one or more  
15 claims the '615 Patent, and (d) users of the Google Wireless Audio System directly infringe one or  
16 more claims of the '615 Patent. For instance, at a minimum, Google has supplied and continues to  
17 supply the YouTube Music, Google Play Music, and YouTube apps to customers while knowing  
18 that installation and/or use of one or more of these apps will infringe one or more claims of the '615  
19 Patent, and that Google's customers then directly infringe one or more claims of the '615 Patent by  
20 installing and/or using one or more of these apps in accordance with Google's product literature.  
21 *See, e.g., id.*

22           86.     Additionally and/or alternatively, Google has indirectly infringed and continues to  
23 indirectly infringe one or more of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(c),  
24 by offering to sell or selling within the United States, and/or importing into the United States,  
25 components in connection with the Google Wireless Audio System that contribute to the direct  
26 infringement of the '615 Patent by users of the Google Wireless Audio System. In particular,  
27 (a) Google had actual knowledge of the '615 Patent or was willfully blind to its existence prior to,  
28 and no later than, February 2019 and had actual knowledge or was willfully blind to Sonos's

1 infringement allegations at least as early as September 28, 2020 when Sonos provided Google a  
 2 copy of the complaint (*see* ¶¶ 19-29 above), (b) Google offers for sale, sells, and/or imports, in  
 3 connection with the Google Wireless Audio System, one or more material components of the  
 4 invention of the '615 Patent that are not staple articles of commerce suitable for substantial  
 5 noninfringing use, (c) Google knows (or should know) that such component(s) were especially  
 6 made or especially adapted for use in an infringement of the '615 Patent, and (d) users of devices  
 7 that comprise such material component(s) directly infringe one or more claims of the '615 Patent.  
 8 For instance, at a minimum, Google offers for sale, sells, and/or imports the YouTube Music,  
 9 Google Play Music, and YouTube apps for installation on devices (*e.g.*, smartphones, tablets, and  
 10 computers) that meet one or more claims of the '615 Patent. *See, e.g.*, Exs. U-Z. These apps are a  
 11 material component of the devices that meet the one or more claims of the '615 Patent. Further,  
 12 Google especially made and/or adapted these apps for installation and use on devices that meet the  
 13 one or more claims of the '615 Patent, and these apps are not a staple article of commerce suitable  
 14 for substantial noninfringing use. Google's customers then directly infringe the one or more claims  
 15 of the '615 Patent by installing and/or using these apps on the customers' devices.

16 87. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from  
 17 the United States software and/or firmware components, which constitute substantial portions of  
 18 the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced  
 19 (and continues to actively, knowingly, and intentionally induce) others outside of the United States  
 20 to combine these software and/or firmware components in a manner that, if such combination  
 21 would have occurred in the United States (as it does pursuant to the theories set forth above),  
 22 infringes the asserted claims of the '615 Patent. And these combinations by those outside of the  
 23 United States do in fact occur. Accordingly, by supplying such software and/or firmware  
 24 components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

25 88. Despite knowing of the '615 Patent, Google supplies software components for  
 26 performing the accused functionality as part of Google's own YouTube Music, Google Play Music,  
 27 and YouTube apps (as well as the other apps identified in Sonos's infringement contentions served  
 28 in this case, *see* Exs. CH, CI) for installation onto computing devices and also as part of Google's



1 own cast-enabled software for installation onto displays. These software and/or firmware  
2 components are at least substantial portions of the components of the patented inventions of the  
3 '615 Patent. Google supplies these software and/or firmware components from the United States  
4 to various entities outside the United States. Google then induces those entities to combine the  
5 supplied components in a manner that would, if combined within the United States, constitute  
6 infringement. Google has actively, knowingly, and intentionally induced (and continues to  
7 actively, knowingly, and intentionally induce) these entities to make such combinations outside the  
8 United States in various ways, in violation of 35 U.S.C. § 271(f)(1).

9 89. For example, through Google's website, advertising and promotional material, user  
10 guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged  
11 and induced (and continues to actively, knowingly, and intentionally encourage and induce) others  
12 outside the United States to install one or more of the accused apps (including YouTube Music,  
13 Google Play Music, and YouTube apps, as well as the other apps set forth in Sonos's infringement  
14 contentions, Exs. CH, CI) onto computing devices outside of the United States. If this combination  
15 were done within the United States, that act would constitute "mak[ing]" an infringing device,  
16 which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under  
17 35 U.S.C. § 271(a).

18 90. As another example, through Google's website, advertising and promotional  
19 material, user guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally  
20 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and  
21 induce) others outside the United States to install software (e.g., firmware updates and/or apps)  
22 onto the accused displays outside of the United States. If this combination were done within the  
23 United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct  
24 infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).

25 91. As another example, through Google's relationship with third-party manufacturers,  
26 third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
27 role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties  
28 to install one or more of the accused apps (including YouTube Music, Google Play Music, and



1 YouTube apps) onto computing devices outside of the United States. If this combination were done  
2 within the United States, that act would constitute “mak[ing]” an infringing device, which  
3 constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent under 35  
4 U.S.C. § 271(a).

5 92. As another example, through Google’s relationship with third-party manufacturers,  
6 third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
7 role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties  
8 to install software (e.g., firmware updates and/or apps) onto the accused displays outside of the  
9 United States. If this combination were done within the United States, that act would constitute  
10 “mak[ing]” an infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-  
11 26, 28-29 of the ‘615 Patent under 35 U.S.C. § 271(a).

12 93. As still another example, through Google’s relationship with entities (including  
13 affiliated entities) that operate servers outside of the United States that host (including YouTube  
14 Music, Google Play Music, and YouTube apps, as well as the other apps set forth in Sonos’s  
15 infringement contentions, Exs. CH, CI) for download onto computing devices and/or software (e.g.,  
16 firmware and/or apps) for download onto accused displays, Google actively, knowingly, and  
17 intentionally encourages and induces or instructs these entities to load, store, or otherwise provide  
18 the apps and/or software onto these servers. If this combination were done within the United States,  
19 that act would constitute direct infringement of certain asserted claims of the ‘615 Patent (e.g.,  
20 claims 13-15, 18-21, and 23-24 of the ‘615 Patent) by “mak[ing]” and/or “us[ing]” servers that host  
21 such software in violation of 35 U.S.C. § 271(a). *See also* Ex. CH (Sonos’s infringement  
22 contentions).

23 94. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software  
24 components in or from the United States to be combined, installed, loaded, and/or used by others  
25 outside of the United States, where these software components are components of the patented  
26 inventions that have no substantial noninfringing use and are not staple articles or commodities of  
27 commerce – with knowledge that these software components were especially made or adapted for  
28 use and an intent that these software components would be combined, installed, loaded, and/or used

1 outside the United States such that, if such combination, installation, load, and/or use occurred  
2 within the United States (as it does pursuant to the theories set forth above), it would infringe the  
3 asserted claims of the Asserted Patents. And these combinations by those outside of the United  
4 States do in fact occur. Accordingly, by supplying such software components in or from the United  
5 States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

6 95. Despite knowing of the '615 Patent, Google supplies software components for  
7 performing the accused Cast functionality as part of Google's own apps (e.g., Google's own  
8 YouTube Music, Google Play Music, and YouTube apps) for installation onto computing devices  
9 outside the United States and also as part of Google's own software (e.g., firmware and/or apps)  
10 for installation onto accused displays outside the United States. Google intends that others outside  
11 the United States, including users, install these software components onto computing devices and  
12 accused displays and knows that such installation does in fact occur and that such installation, if  
13 occurring in the United States, would constitute "mak[ing]" an infringing device thereby directly  
14 infringing claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).

15 96. As another example, Google supplies software components for performing the  
16 accused Cast functionality to third-party manufacturers, third-party distributors, or to an otherwise  
17 affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United States  
18 installs these software components onto computing devices outside of the United States. Google  
19 intends that these parties install these software components onto computing devices outside of the  
20 United States. If this combination were done within the United States, that act would constitute  
21 "mak[ing]" an infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-  
22 26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).

23 97. As another example, Google supplies software components for performing the  
24 accused Cast functionality to entities (including affiliated entities) that operate servers outside of  
25 the United States that host Cast-enabled apps for download onto Cast-enabled computing devices  
26 and/or Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for download onto Cast-  
27 enabled displays. Google intends that these entities load, store, or otherwise provide the Cast-  
28 enabled apps and/or Cast-enabled software onto these servers. If this combination were done within

1 the United States, that act would constitute direct infringement of certain asserted claims of the  
2 '615 Patent (e.g., claims 13-15, 18-21, and 23-24 of the '615 Patent) by “mak[ing]” and/or “us[ing]”  
3 servers that host such software in violation of 35 U.S.C. § 271(a).

4 98. Google knows the foregoing software components for performing the accused Cast  
5 functionality are material components of infringing devices and the patented inventions that are not  
6 staple articles or commodities of commerce suitable for substantial noninfringing use because the  
7 only possible use for these software components is to be loaded, installed, and/or run on infringing  
8 computing devices and displays. *See also* Ex. CH (Sonos’s infringement contentions).

9 99. Google’s infringement of the '615 Patent is also willful because Google (a) had  
10 actual knowledge of the '615 Patent no later than February 2019 and actual notice of Sonos’s  
11 infringement contentions no later than September 28, 2020 (*see* ¶¶ 19-29 above), (b) engaged in  
12 the aforementioned activity despite an objectively high likelihood that Google’s actions constituted  
13 infringement of the '615 Patent, and (c) this objectively-defined risk was either known or so  
14 obvious that it should have been known to Google.

15 100. Given the five-year period over which Sonos put Google on consistent and repeated  
16 notice of Sonos’s patents and the breadth of Sonos’s patent portfolio concerning specifically the  
17 products accused in this case, detailed above, this knowledge establishes that Google was, for some  
18 time periods, at least willfully blind to the fact that the '615 Patent existed and, for other time  
19 periods, had actual knowledge of the '615 Patent. Further, this knowledge and repeated and  
20 persistent disclosure establishes that Google, for some time periods, had at least failed to investigate  
21 whether it infringed the '615 Patent despite the existence of a high risk of infringement and, for  
22 other time periods, had actual knowledge of a credible and specific allegation of infringement of  
23 the '615 Patent.

24 101. Additional allegations regarding Google’s pre-suit knowledge of the '615 Patent and  
25 willful infringement will likely have evidentiary support after a reasonable opportunity for  
26 discovery.

102. Sonos is entitled to recover from Google all damages that Sonos has sustained as a result of Google's infringement of the '615 Patent, including, without limitation, a reasonable royalty and lost profits.

103. Google's infringement of the '615 Patent was and continues to be willful and deliberate, entitling Sonos to enhanced damages.

104. Google's infringement of the '615 Patent is exceptional and entitles Sonos to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

105. Google's infringement of the '615 Patent has caused irreparable harm (including the loss of market share) to Sonos and will continue to do so unless enjoined by this Court.

**COUNTERCLAIM II: INFRINGEMENT OF U.S. PATENT NO. 10,779,033**

106. Sonos incorporates by reference and re-alleges paragraphs 1-93 of this Amended Complaint as if fully set forth herein.

107. Google and/or users of the Google Wireless Audio System have directly infringed (either literally or under the doctrine of equivalents) and continue to directly infringe one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for sale, and/or selling the Google Wireless Audio System within the United States and/or importing the Google Wireless Audio System into the United States without authority or license.

108. In the course of this litigation, Sonos has served Google with infringement contentions detailing Google's infringement of the '033 Patent. *See* Ex. CH; Ex. CJ.

109. On September 28, 2020, Sonos provided Google with a draft of the original complaint prior to its filing. That draft identified the '033 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '033 Patent prior to Sonos filing this action.

110. Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '033 Patent. In particular, (a) Google had actual knowledge of the '033 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than

September 28, 2020 when Sonos provided Google with a copy of the complaint (*see* ¶¶ 19-29 above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '033 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (*see* Exs. U-Z; *see also* citations above in the exemplary infringement claim chart for claim 1 of the '033 Patent), (c) Google knows (or should know) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '033 Patent, and (d) users of the Google Wireless Audio System directly infringe one or more claims of the '033 Patent. For instance, at a minimum, Google has supplied and continues to supply the YouTube Music, Google Play Music, and YouTube apps to customers while knowing that installation and/or use of one or more of these apps will infringe one or more claims of the '033 Patent, and that Google's customers then directly infringe one or more claims of the '033 Patent by installing and/or using one or more of these apps in accordance with Google's product literature. *See, e.g., id.*

111. Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '033 Patent by users of the Google Wireless Audio System. In particular, (a) Google had actual knowledge of the '033 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (*see* ¶¶ 19-29 above), (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '033 Patent that are not staple articles of commerce suitable for substantial noninfringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '033 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '033 Patent.

1 For instance, at a minimum, Google offers for sale, sells, and/or imports the YouTube Music,  
2 Google Play Music, and YouTube apps for installation on devices (*e.g.*, smartphones, tablets, and  
3 computers) that meet one or more claims of the '033 Patent. *See, e.g.*, Exs. U-Z. These apps are a  
4 material component of the devices that meet the one or more claims of the '033 Patent. Further,  
5 Google especially made and/or adapted these apps for installation and use on devices that meet the  
6 one or more claims of the '033 Patent, and these apps are not a staple article of commerce suitable  
7 for substantial noninfringing use. Google's customers then directly infringe the one or more claims  
8 of the '033 Patent by installing and/or using these apps on the customers' devices.

9 112. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from  
10 the United States software and/or firmware components, which constitute substantial portions of  
11 the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced  
12 (and continues to actively, knowingly, and intentionally induce) others outside of the United States  
13 to combine these software and/or firmware components in a manner that, if such combination  
14 would have occurred in the United States (as it does pursuant to the theories set forth above),  
15 infringes the asserted claims of the '033 Patent. And these combinations by those outside of the  
16 United States do in fact occur. Accordingly, by supplying such software and/or firmware  
17 components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

18 113. Despite knowing of the '033 Patent, Google supplies software components for  
19 performing the accused functionality as part of Google's own YouTube Music, Google Play Music,  
20 and YouTube apps (as well as the other apps identified in Google's infringement contentions served  
21 in this case, *see* Exs. CH, CJ) for installation onto computing devices and also as part of Google's  
22 own cast-enabled software for installation onto displays. These software and/or firmware  
23 components are at least substantial portions of the components of the patented inventions of the  
24 '615 Patent. Google supplies these software and/or firmware components from the United States  
25 to various entities outside the United States. Google then induces those entities to combine the  
26 supplied components in a manner that would, if combined within the United States, constitute  
27 infringement. Google has actively, knowingly, and intentionally induced (and continues to  
28

1 actively, knowingly, and intentionally induce) these entities to make such combinations outside the  
2 United States in various ways, in violation of 35 U.S.C. § 271(f)(1).

3 114. For example, through Google’s website, advertising and promotional material, user  
4 guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged  
5 and induced (and continues to actively, knowingly, and intentionally encourage and induce) others  
6 outside the United States to install one or more of the accused apps (including YouTube Music,  
7 Google Play Music, and YouTube apps) onto computing devices outside of the United States. If  
8 this combination were done within the United States, that act would constitute “mak[ing]” an  
9 infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the ‘033 Patent  
10 under 35 U.S.C. § 271(a).

11 115. As another example, through Google’s website, advertising and promotional  
12 material, user guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally  
13 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and  
14 induce) others outside the United States to install software (e.g., firmware updates and/or apps)  
15 onto the accused displays outside of the United States. If this combination were done within the  
16 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
17 infringement of claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C. § 271(a).

18 116. As another example, through Google’s relationship with third-party manufacturers,  
19 third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
20 role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties  
21 to install one or more of the accused apps (including YouTube Music, Google Play Music, and  
22 YouTube apps, as well as the other apps set forth in Sonos’s infringement contentions, Exs. CH,  
23 CJ) onto computing devices outside of the United States. If this combination were done within the  
24 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
25 infringement of claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C. § 271(a).

26 117. As another example, through Google’s relationship with third-party manufacturers,  
27 third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
28 role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties



1 to install software (e.g., firmware updates and/or apps) onto the accused displays outside of the  
2 United States. If this combination were done within the United States, that act would constitute  
3 “mak[ing]” an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the  
4 ‘033 Patent under 35 U.S.C. § 271(a).

5 118. As still another example, through Google’s relationship with entities (including  
6 affiliated entities) that operate servers outside of the United States that host apps (e.g., Google’s  
7 own YouTube Music, Google Play Music, and YouTube apps) for download onto computing  
8 devices and/or software (e.g., firmware and/or apps) for download onto accused displays, Google  
9 actively, knowingly, and intentionally encourages and induces or instructs these entities to load,  
10 store, or otherwise provide the apps and/or software onto these servers. If this combination were  
11 done within the United States, that act would constitute direct infringement of certain asserted  
12 claims of the 033 Patent (e.g., claims 12-13 of the ‘033 Patent) by “mak[ing]” and/or “us[ing]”  
13 servers that host such software in violation of 35 U.S.C. § 271(a). *See also* Ex. CH (Sonos’s  
14 infringement contentions).

15 119. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software  
16 components in or from the United States to be combined, installed, loaded, and/or used by others  
17 outside of the United States, where these software components are components of the patented  
18 inventions that have no substantial noninfringing use and are not staple articles or commodities of  
19 commerce – with knowledge that these software components were especially made or adapted for  
20 use and an intent that these software components would be combined, installed, loaded, and/or used  
21 outside the United States such that, if such combination, installation, load, and/or use occurred  
22 within the United States (as it does pursuant to the theories set forth above), it would infringe the  
23 asserted claims of the Asserted Patents. And these combinations by those outside of the United  
24 States do in fact occur. Accordingly, by supplying such software components in or from the United  
25 States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

26 120. Despite knowing of the ‘033 Patent, Google supplies software components for  
27 performing the accused Cast functionality as part of Google’s own apps (including YouTube Music,  
28 Google Play Music, and YouTube apps, as well as the other apps set forth in Sonos’s infringement



1 contentions, Exs. CH, CJ) for installation onto computing devices outside the United States and  
2 also as part of Google's own software (e.g., firmware and/or apps) for installation onto accused  
3 displays outside the United States. Google intends that others outside the United States, including  
4 users, install these software components onto computing devices and accused displays and knows  
5 that such installation does in fact occur and that such installation, if occurring in the United States,  
6 would constitute "mak[ing]" an infringing device thereby directly infringing claims 1-2, 4, 7-13 of  
7 the '033 Patent under 35 U.S.C. § 271(a).

8 121. As another example, Google supplies software components for performing the  
9 accused Cast functionality to third-party manufacturers, third-party distributors, or to an otherwise  
10 affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United States  
11 installs these software components onto computing devices outside of the United States. Google  
12 intends that these parties install these software components onto computing devices outside of the  
13 United States. If this combination were done within the United States, that act would constitute  
14 "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the  
15 '033 Patent under 35 U.S.C. § 271(a).

16 122. As another example, Google supplies software components for performing the  
17 accused Cast functionality to entities (including affiliated entities) that operate servers outside of  
18 the United States that host apps for download onto computing devices and/or Cast-enabled software  
19 (e.g., firmware and/or apps) for download onto accused displays. Google intends that these entities  
20 load, store, or otherwise provide the apps and/or accused software onto these servers. If this  
21 combination were done within the United States, that act would constitute direct infringement of  
22 certain asserted claims of the '033 Patent (e.g., claims 12-13 of the '033 Patent) by "mak[ing]"  
23 and/or "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a).

24 123. Google knows the foregoing software components for performing the accused Cast  
25 functionality are material components of infringing devices and the patented inventions that are not  
26 staple articles or commodities of commerce suitable for substantial noninfringing use because the  
27 only possible use for these software components is to be loaded, installed, and/or run on infringing  
28 Cast-enabled computing devices and Cast-enabled displays.

1           124. Google's infringement of the '033 Patent is also willful because Google (a) had  
2 actual knowledge of the '033 Patent and Sonos's infringement contentions no later than  
3 September 28, 2020 (*see* ¶¶ 19-29 above), (b) engaged in the aforementioned activity despite an  
4 objectively high likelihood that Google's actions constituted infringement of the '033 Patent, and  
5 (c) this objectively-defined risk was either known or so obvious that it should have been known to  
6 Google.

7           125. Given the five-year period over which Sonos put Google on consistent and repeated  
8 notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning specifically the  
9 products accused in this case, detailed above, this knowledge establishes that Google was, for some  
10 time periods, at least willfully blind to the fact that the '033 Patent existed and, for other time  
11 periods, had actual knowledge of the '033 Patent. Further, this knowledge and repeated and  
12 persistent disclosure establishes that Google, for some time periods, had at least failed to investigate  
13 whether it infringed the '033 Patent despite the existence of a high risk of infringement and, for  
14 other time periods, had actual knowledge of a credible and specific allegation of infringement of  
15 the '033 Patent.

16           126. Additional allegations regarding Google's pre-suit knowledge of the '033 Patent and  
17 willful infringement will likely have evidentiary support after a reasonable opportunity for  
18 discovery.

19           127. Sonos is entitled to recover from Google all damages that Sonos has sustained as a  
20 result of Google's infringement of the '033 Patent, including, without limitation, a reasonable  
21 royalty and lost profits.

22           128. Google's infringement of the '033 Patent was and continues to be willful and  
23 deliberate, entitling Sonos to enhanced damages.

24           129. Google's infringement of the '033 Patent is exceptional and entitles Sonos to  
25 attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

26           130. Google's infringement of the '033 Patent has caused irreparable harm (including the  
27 loss of market share) to Sonos and will continue to do so unless enjoined by this Court.  
28

**COUNTERCLAIM III: INFRINGEMENT OF U.S. PATENT NO. 10,469,966**

131. Sonos incorporates by reference and re-alleges paragraphs 1-106 of this Amended Complaint as if fully set forth herein.

132. Google and/or users of the Google Wireless Audio System have directly infringed (either literally or under the doctrine of equivalents) and continue to directly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for sale, and/or selling the Google Wireless Audio System within the United States and/or importing the Google Wireless Audio System into the United States without authority or license.

133. In the course of this litigation, Sonos has served Google with infringement contentions detailing Google's infringement of the '966 Patent. *See* Ex. CH; Ex. CK.

134. On September 28, 2020, Sonos provided Google with a draft of the original complaint prior to its filing. That draft identified the '966 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '966 Patent prior to Sonos filing this action.

135. Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '966 Patent. In particular, (a) Google had actual knowledge of the '966 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (*see* ¶¶ 19-29 above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '966 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (*see* Exs. U-V; *see also* citations above in the exemplary infringement claim chart for claim 1 of the '966 Patent), (c) Google knows (or should know) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '966 Patent, and (d) users of the Google Wireless Audio System directly infringe one or

1 more claims of the '966 Patent. For instance, at a minimum, Google has supplied and continues to  
2 supply the Google Home app to customers while knowing that installation and/or use of this app  
3 will infringe one or more claims of the '966 Patent, and that Google's customers then directly  
4 infringe one or more claims of the '966 Patent by installing and/or using this app in accordance  
5 with Google's product literature. *See, e.g., id.*

6 136. Additionally and/or alternatively, Google has indirectly infringed and continues to  
7 indirectly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(c),  
8 by offering to sell or selling within the United States, and/or importing into the United States,  
9 components in connection with the Google Wireless Audio System that contribute to the direct  
10 infringement of the '966 Patent by users of the Google Wireless Audio System. In particular,  
11 (a) Google had actual knowledge of the '966 Patent and Sonos's infringement contentions, or was  
12 willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google  
13 with a copy of the complaint (*see* ¶¶ 19-29 above), (b) Google offers for sale, sells, and/or imports,  
14 in connection with the Google Wireless Audio System, one or more material components of the  
15 invention of the '966 Patent that are not staple articles of commerce suitable for substantial  
16 noninfringing use, (c) Google knows (or should know) that such component(s) were especially  
17 made or especially adapted for use in an infringement of the '966 Patent, and (d) users of devices  
18 that comprise such material component(s) directly infringe one or more claims of the '966 Patent.

19 137. For instance, at a minimum, Google offers for sale, sells, and/or imports the Google  
20 Home app for installation on devices (*e.g.*, smartphones, tablets, and computers) that meet one or  
21 more claims of the '966 Patent. *See, e.g.*, Exs. U-V. This app is a material component of the  
22 devices that meet the one or more claims of the '966 Patent. Further, Google especially made  
23 and/or adapted this app for installation and use on devices that meet the one or more claims of the  
24 '966 Patent, and this app is not a staple article of commerce suitable for substantial noninfringing  
25 use. Google's customers then directly infringe the one or more claims of the '966 Patent by  
26 installing and/or using the Google Home app on the customers' devices.

27 138. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from  
28 the United States software and/or firmware components, which constitute substantial portions of

1 the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced  
2 (and continues to actively, knowingly, and intentionally induce) others outside of the United States  
3 to combine these software and/or firmware components in a manner that, if such combination  
4 would have occurred in the United States (as it does pursuant to the theories set forth above),  
5 infringes the asserted claims of the '033 Patent. And these combinations by those outside of the  
6 United States do in fact occur. Accordingly, by supplying such software and/or firmware  
7 components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

8 139. Despite knowing of the '966 Patent, Google supplies the Google Home app from  
9 the United States to various entities outside the United States. Google then induces those entities  
10 to combine the Google Home app in a manner that would, if combined within the United States,  
11 constitute infringement. Google has actively, knowingly, and intentionally induced (and continues  
12 to actively, knowingly, and intentionally induce) these entities to make such combinations outside  
13 the United States in various ways, in violation of 35 U.S.C. § 271(b).

14 140. For example, through Google's website, advertising and promotional material, user  
15 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or  
16 displayed on the Cast-enabled media players and Cast-enabled displays, Google has actively,  
17 knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and  
18 intentionally encourage and induce) others outside the United States to install the Google Home  
19 app onto computing devices outside the United States. If this combination were done within the  
20 United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct  
21 infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).

22 141. As another example, through Google's relationship with entities (including  
23 affiliated entities) that operate servers outside of the United States that host the Google Home app  
24 for download onto smartphone, tablet, and computer devices, Google actively, knowingly, and  
25 intentionally encourages and induces or instructs these entities to load, store, or otherwise provide  
26 the Google Home app onto these servers. If this combination were done within the United States,  
27 that act would constitute direct infringement of certain asserted claims of the '966 Patent (e.g.,  
28

1 claims 9-12 and 14-16) by “mak[ing]” and/or “us[ing]” servers that host such software in violation  
2 of 35 U.S.C. § 271(a).

3 142. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software  
4 components in or from the United States to be combined, installed, loaded, and/or used by others  
5 outside of the United States, where these software components are components of the patented  
6 inventions that have no substantial noninfringing use and are not staple articles or commodities of  
7 commerce – with knowledge that these software components were especially made or adapted for  
8 use and an intent that these software components would be combined, installed, loaded, and/or used  
9 outside the United States such that, if such combination, installation, load, and/or use occurred  
10 within the United States (as it does pursuant to the theories set forth above), it would infringe the  
11 asserted claims of the Asserted Patents. And these combinations by those outside of the United  
12 States do in fact occur. Accordingly, by supplying such software components in or from the United  
13 States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

14 143. Despite knowing of the ’966 Patent, Google supplies software components for  
15 performing the accused functionality as part of the Google Home app in or from the United States  
16 to various entities outside the United States. Google knows and intends for those entities to  
17 combine the software components in a manner that would, if combined within the United States,  
18 constitute infringement because each combination or installation of the Google Home app onto a  
19 computing device would constitute “mak[ing]” an infringing device and thus directly infringe  
20 claims 1-4, 6-12, 14-16 of the ’966 Patent under 35 U.S.C. § 271(a).

21 144. Google knows that the software components included in the Google Home app are  
22 material components of infringing devices that are not staple articles or commodities of commerce  
23 suitable for substantial noninfringing use because the only possible use for these software  
24 components is to be installed and run on infringing computing devices.

25 145. Along with its actual knowledge of the ’966 Patent, Google knew (or should have  
26 known) that the software components included in the Google Home app were especially made or  
27 adapted for installation on infringing devices, and that installation of these software components  
28 by others outside of the United States would, if done within the United States, constitute (and

1 continues to result in) direct infringement of the '966 Patent under 35 U.S.C. § 271(a) because each  
2 such installation “makes” a device that meets every element of every asserted claims.

3 146. Moreover, as a result of Google providing software components of the Google  
4 Home app, others have outside of the United States combined the Google Home app in a manner  
5 that, if done within the United States, would constitute direct infringement of the asserted claims  
6 of the '966 Patent. For example, others outside the United States have installed the Google Home  
7 app onto computing devices outside the United States. If this combination were done within the  
8 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
9 infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).

10 147. As another example, Google supplies software components of the Google Home app  
11 to entities (including affiliated entities) that operate servers outside of the United States that host  
12 the Google Home app for download onto smartphone, tablet, and computer devices. Google intends  
13 that these entities load, store, or otherwise provide the Google Home app onto these servers. If this  
14 combination were done within the United States, that act would constitute direct infringement of  
15 certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16) by “mak[ing]” and/or  
16 “us[ing]” servers that host such software in violation of 35 U.S.C. § 271(a). *See also* Ex. CH  
17 (Sonos’s infringement contentions).

18 148. Google’s infringement of the '966 Patent is also willful because Google (a) had  
19 actual knowledge of the '966 Patent and actual knowledge of Sonos’s infringement contentions no  
20 later than September 28, 2020 (*see* ¶¶ 19-29 above), (b) engaged in the aforementioned activity  
21 despite an objectively high likelihood that Google’s actions constituted infringement of the '966  
22 Patent, and (c) this objectively-defined risk was either known or so obvious that it should have been  
23 known to Google.

24 149. Given the five-year period over which Sonos put Google on consistent and repeated  
25 notice of Sonos’s patents and the breadth of Sonos’s patent portfolio concerning specifically the  
26 products accused in this case, detailed above, this knowledge establishes that Google was, for some  
27 time periods, at least willfully blind to the fact that the '966 Patent existed and, for other time  
28 periods, had actual knowledge of the '966 Patent. Further, this knowledge and repeated and



1 persistent disclosure establishes that Google, for some time periods, had at least failed to investigate  
 2 whether it infringed the '966 Patent despite the existence of a high risk of infringement and, for  
 3 other time periods, had actual knowledge of a credible and specific allegation of infringement of  
 4 the '966 Patent.

5 150. Additional allegations regarding Google's pre-suit knowledge of the '966 Patent and  
 6 willful infringement will likely have evidentiary support after a reasonable opportunity for  
 7 discovery.

8 151. Sonos is in compliance with any applicable marking and/or notice provisions of 35  
 9 U.S.C. § 287 with respect to the '966 Patent.

10 152. Sonos is entitled to recover from Google all damages that Sonos has sustained as a  
 11 result of Google's infringement of the '966 Patent, including, without limitation, a reasonable  
 12 royalty and lost profits.

13 153. Google's infringement of the '966 Patent was and continues to be willful and  
 14 deliberate, entitling Sonos to enhanced damages.

15 154. Google's infringement of the '966 Patent is exceptional and entitles Sonos to  
 16 attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

17 155. Google's infringement of the '966 Patent has caused irreparable harm (including the  
 18 loss of market share) to Sonos and will continue to do so unless enjoined by this Court.

19 **COUNTERCLAIM IV: INFRINGEMENT OF U.S. PATENT NO. 10,848,885**

20 156. Sonos incorporates by reference and re-alleges paragraphs 1-121 of this Amended  
 21 Complaint as if fully set forth herein.

22 157. Google and/or users of the Google Wireless Audio System have directly infringed  
 23 (either literally or under the doctrine of equivalents) and continue to directly infringe one or more  
 24 of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for  
 25 sale, and/or selling the Google Wireless Audio System within the United States and/or importing  
 26 the Google Wireless Audio System into the United States without authority or license.

27 158. In the course of this litigation, Sonos has served Google with infringement  
 28 contentions detailing Google's infringement of the '885 Patent. *See* Ex. CH; Ex. CL.



1           159. On January 8, 2021, Sonos provided Google with a draft of this Amended Complaint  
2 prior to its filing. That draft identified the '885 Patent and described how Google's products  
3 infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims  
4 of the '885 Patent prior to Sonos filing the amended complaint in this action.

5           160. Additionally and/or alternatively, Google has indirectly infringed and continues to  
6 indirectly infringe one or more of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(b),  
7 by actively inducing users of the Google Wireless Audio System to directly infringe the one or  
8 more claims of the '885 Patent. In particular, (a) Google had actual knowledge of the '885 Patent  
9 and Sonos's infringement contentions, or was willfully blind to their existence, no later than  
10 January 8, 2021 when Sonos provided Google with a copy of the Amended Complaint, (b) Google  
11 intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly  
12 infringe one or more claims of the '885 Patent by promoting, advertising, and instructing customers  
13 and potential customers about the Google Wireless Audio System (including uses thereof) and  
14 encouraging such customers and potential customers to engage in activity that constitutes direct  
15 infringement (*see* Exs. U-V; *see also* citations above in the exemplary infringement claim chart for  
16 claim 1 of the '885 Patent), (c) Google knows (or should know) that its actions will induce users of  
17 the Google Wireless Audio System to directly infringe one or more claims the '885 Patent, and  
18 (d) users of the Google Wireless Audio System directly infringe one or more claims of the '885  
19 Patent. For instance, at a minimum, Google has supplied and continues to supply the Chromecast-  
20 enabled media players to customers while knowing that use of these products will infringe one or  
21 more claims of the '885 Patent and that Google's customers then directly infringe one or more  
22 claims of the '885 Patent by using the Chromecast-enabled media players in accordance with  
23 Google's product literature. *See, e.g., id.*

24           161. Additionally and/or alternatively, Google has indirectly infringed and continues to  
25 indirectly infringe one or more of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(c),  
26 by offering to sell or selling within the United States, and/or importing into the United States,  
27 components in connection with the Google Wireless Audio System that contribute to the direct  
28 infringement of the '885 Patent by users of the Google Wireless Audio System. In particular,

(a) Google had actual knowledge of the '885 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than January 8, 2021 when Sonos provided Google with a copy of the Amended Complaint, (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '885 Patent that are not staple articles of commerce suitable for substantial noninfringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '885 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '885 Patent. For instance, at a minimum, Google offers for sale, sells, and/or imports software updates for the Chromecast-enabled media players that meet one or more claims of the '885 Patent. *See, e.g.*, Ex. AO. These software updates are material components of the Chromecast-enabled media players that meet the one or more claims of the '885 Patent. Further, Google especially made and/or adapted these software updates for installation and use on the Chromecast-enabled media players that meet the one or more claims of the '885 Patent, and these software updates are not staple articles of commerce suitable for substantial noninfringing use. Google's customers then directly infringe the one or more claims of the '885 Patent by installing and using software updates on the Chromecast-enabled media players.

162. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the United States software and/or firmware components, which constitute substantial portions of the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) others outside of the United States to combine these software and/or firmware components in a manner that, if such combination would have occurred in the United States (as it does pursuant to the theories set forth above), infringes the asserted claims of the '033 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software and/or firmware components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

163. Despite knowing of the '885 Patent, Google supplies from the United States software components for performing the accused functionality as part of firmware updates for

1 accused media players. Google then through Google's website, advertising and promotional  
2 material, user guides, the Google Home app (among other apps offered by Google), and/or the  
3 Google Play Store, Google has actively, knowingly, and intentionally encouraged and induced (and  
4 continues to actively, knowingly, and intentionally encourage and induce) others outside the United  
5 States to install firmware updates onto accused media players outside the United States. If this  
6 combination were done within the United States, that act would constitute "mak[ing]" or "us[ing]"  
7 an infringing device, which constitutes direct infringement of the asserted claims of the '885 Patent  
8 under 35 U.S.C. § 271(a).

9 164. As another example, through Google's relationship with third-party manufacturers,  
10 third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
11 role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties  
12 to, outside of the United States, install or load firmware onto Cast-enabled media players. If this  
13 combination were done within the United States, that act would constitute "mak[ing]" an infringing  
14 device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the '885 Patent under  
15 35 U.S.C. § 271(a).

16 165. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software  
17 components in or from the United States to be combined, installed, loaded, and/or used by others  
18 outside of the United States, where these software components are components of the patented  
19 inventions that have no substantial noninfringing use and are not staple articles or commodities of  
20 commerce – with knowledge that these software components were especially made or adapted for  
21 use and an intent that these software components would be combined, installed, loaded, and/or used  
22 outside the United States such that, if such combination, installation, load, and/or use occurred  
23 within the United States (as it does pursuant to the theories set forth above), it would infringe the  
24 asserted claims of the Asserted Patents. And these combinations by those outside of the United  
25 States do in fact occur. Accordingly, by supplying such software components in or from the United  
26 States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

27 166. Despite knowing of the '885 Patent, Google supplies in or from the United States  
28 software components for performing the accused functionality as part of firmware updates for

1 accused media players, and users install such a firmware update outside of the United States in a  
2 manner that, if done within the United States, would constitute “mak[ing]” an infringing device and  
3 thereby directly infringe claims 1-3, 5-10, 12-14 of the ’885 Patent under 35 U.S.C. § 271(a). The  
4 software components included in the firmware updates are material components of the patented  
5 invention that are not staple articles or commodities of commerce suitable for substantial  
6 noninfringing use because the only possible use for these software components is to be installed  
7 and run on accused media players, which constitute infringing devices.

8 167. Along with its actual knowledge of the ’885 Patent, Google knew (or should have  
9 known) that the software components included in the firmware updates were especially made or  
10 adapted for installation on accused media players, and that installation of these software  
11 components by others outside the United States would, if done within the United States, have  
12 resulted in (and continues to result in) direct infringement of the ’885 Patent under 35 U.S.C. §  
13 271(a) because each such installation “makes” an updated player that meets every element of every  
14 asserted claims.

15 168. Moreover, as a result of Google providing such firmware updates others have  
16 outside of the United States combined the firmware updates in a manner that, if done within the  
17 United States, would constitute direct infringement of claims 1-3, 5-10, 12-14 of the ’885 Patent.  
18 For example, users have, outside of the United States, installed the supplied software components  
19 included as part of the firmware updates onto accused media players outside the United States,  
20 which if done within the United States would constitute “making” updated Cast-enabled media  
21 players, which constitutes direct infringement.

22 169. As another example, Google provides firmware to manufacturers, third-party  
23 distributors, or an otherwise affiliated entity that acts in a manufacturer or distributor role, who  
24 then, outside of the United States installs or loads such firmware onto accused media players. If  
25 this combination were done within the United States, that act would constitute “mak[ing]” an  
26 infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the ’885  
27 Patent under 35 U.S.C. § 271(a). *See also* Ex. CH (Sonos’s infringement contentions).  
28

1           170. Google's infringement of the '885 Patent is also willful because Google (a) had  
2 actual knowledge of the '885 Patent and actual knowledge of Sonos's infringement contentions no  
3 later January 8, 2021 when Sonos provided Google with a copy of the Amended Complaint,  
4 (b) engaged in the aforementioned activity despite an objectively high likelihood that Google's  
5 actions constituted infringement of the '885 Patent, and (c) this objectively-defined risk was either  
6 known or so obvious that it should have been known to Google.

7           171. Given the five-year period over which Sonos put Google on consistent and repeated  
8 notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning specifically the  
9 products accused in this case, detailed above, this knowledge establishes that Google was, for some  
10 time periods, at least willfully blind to the fact that the '885 Patent existed and, for other time  
11 periods, had actual knowledge of the '885 Patent. Further, this knowledge and repeated and  
12 persistent disclosure establishes that Google, for some time periods, had at least failed to investigate  
13 whether it infringed the '885 Patent despite the existence of a high risk of infringement and, for  
14 other time periods, had actual knowledge of a credible and specific allegation of infringement of  
15 the '885 Patent.

16           172. Additional allegations regarding Google's pre-suit knowledge of the '885 Patent and  
17 willful infringement will likely have evidentiary support after a reasonable opportunity for  
18 discovery.

19           173. Sonos is entitled to recover from Google all damages that Sonos has sustained as a  
20 result of Google's infringement of the '885 Patent, including, without limitation, a reasonable  
21 royalty and lost profits.

22           174. Google's infringement of the '885 Patent was and continues to be willful and  
23 deliberate, entitling Sonos to enhanced damages.

24           175. Google's infringement of the '885 Patent is exceptional and entitles Sonos to  
25 attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285. Google's  
26 infringement of the '885 Patent has caused irreparable harm (including the loss of market share) to  
27 Sonos and will continue to do so unless enjoined by this Court.  
28

**PRAYER FOR RELIEF**

WHEREFORE, Sonos respectfully requests:

- A. That Judgment be entered that Google has infringed at least one or more claims of the patents-in-suit, directly and/or indirectly, literally and/or under the doctrine of equivalents, and that such infringement is willful;
- B. An injunction enjoining Google, its officers, agents, servants, employees and attorneys, and other persons in active concert or participation with Google, and its parents, subsidiaries, divisions, successors and assigns, from further infringement of the patents-in-suit.
- C. An award of damages sufficient to compensate Sonos for Google's infringement under 35 U.S.C. § 284, including an enhancement of damages on account of Google's willful infringement;
- D. That the case be found exceptional under 35 U.S.C. § 285 and that Sonos be awarded its reasonable attorneys' fees;
- E. Costs and expenses in this action;
- F. An award of prejudgment and post-judgment interest; and
- G. Such other and further relief as the Court may deem just and proper.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Sonos respectfully demands a trial by jury on all issues triable by jury.

Dated: March 18, 2022

ORRICK, HERRINGTON & SUTCLIFFE LLP  
and  
LEE SULLIVAN SHEA & SMITH LLP

By: /s/ Cole B. Richter  
Cole B. Richter (admitted *pro hac*)

*Attorneys for Defendant Sonos, Inc.*